

# SERVICE MANUAL

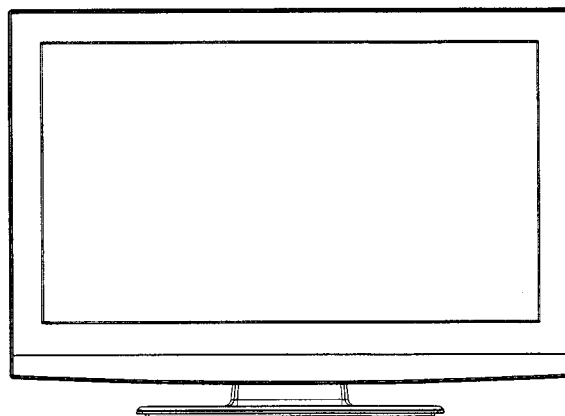
## ORION

## TV32PL120D

Digital LCD Colour Television

**HD**  
ready

**DVB**  
Digital Video  
Broadcasting



ORIGINAL  
CHASSIS CODE B

Best. Nr. SM32PL120

## SERVICING NOTICES ON CHECKING

### 1. KEEP THE NOTICES


As for the places which need special attentions, they are indicated with the labels or seals on the cabinet, chassis and parts. Make sure to keep the indications and notices in the operation manual.

### 2. AVOID AN ELECTRIC SHOCK

There is a high voltage part inside. Avoid an electric shock while the electric current is flowing.

### 3. USE THE DESIGNATED PARTS

The parts in this equipment have the specific characters of incombustibility and withstand voltage for safety. Therefore, the part which is replaced should be used the part which has the same character.

Especially as to the important parts for safety which is indicated in the circuit diagram or the table of parts as a  mark, the designated parts must be used.

### 4. BE CAREFUL WITH THE LCD PANEL

Avoid a shock to the panel while servicing. Take enough care to deal with it.

### 5. PUT PARTS AND WIRES IN THE ORIGINAL POSITION AFTER ASSEMBLING OR WIRING

There are parts which use the insulation material such as a tube or tape for safety, or which are assembled in the condition that these do not contact with the printed board. The inside wiring is designed not to get closer to the pyrogenic parts and high voltage parts. Therefore, put these parts in the original positions.

### 6. PERFORM A SAFETY CHECK AFTER SERVICING

Confirm that the screws, parts and wiring which were removed in order to service are put in the original positions, or whether there are the portions which are deteriorated around the serviced places serviced or not. Check the insulation between the antenna terminal or external metal and the AC cord plug blades. And be sure the safety of that.

#### (INSULATION CHECK PROCEDURE)

1. Unplug the plug from the AC outlet.
2. Remove the antenna terminal on TV and turn on the TV.
3. Insulation resistance between the cord plug terminals and the external exposure metal **[Note 2]** should be more than 1M ohm by using the 500V insulation resistance meter **[Note 1]**.
4. If the insulation resistance is less than 1M ohm, the inspection repair should be required.

#### **[Note 1]**

If you have not the 500V insulation resistance meter, use a Tester.

#### **[Note 2]**

External exposure metal: Antenna terminal  
Headphone jack

## HOW TO ORDER PARTS

Please include the following informations when you order parts. (Particularly the CHASSIS CODE.)

1. MODEL NUMBER and CHASSIS CODE  
YOU can find it in the back of your unit.
2. PART NO. and DESCRIPTION  
You can find it in your SERVICE MANUAL.

## IMPORTANT

When you exchange IC and Transistor with a heat sink, apply silicon grease (YG6260M) on the contact section of the heat sink. Before applying new silicon grease, remove all the old silicon grease. (Old grease may cause damage to the IC and Transistor).

## **PARENTAL CONTROL - RATING LEVEL**

### **4 DIGIT PASSWORD CANCELLATION**

If the stored 4 digit password in the Rating Level menu needs to be cancelled, please follow the steps below.

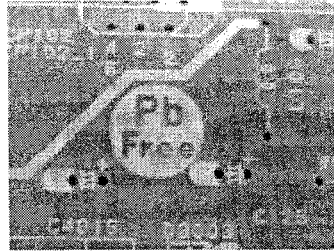
1. Turn on the power.
2. Set the VOLUME to minimum.
3. Press both VOL. DOWN button on the set and Channel button **(3)** on the remote control for more than 2 seconds.
4. The 4 digit password has now been cancelled.
5. Unplug the AC cord, then plug it in.

**NOTE:** No indications on the screen when the Parental Lock is setting.  
Initializing password is 0000.

## ABOUT LEAD FREE SOLDER (PbF)

### Distinction of PbF PCB:

PCBs (manufactured) using lead free solder will have a PbF printing on the PCB.  
(Please refer to figures.)



### Caution:

- Pb free solder has a higher melting point than standard solder;  
Typically the melting point is 86°F~104°F(30°C~40°C) higher.  
Please use a soldering iron with temperature control and adjust it to 650°F ± 20°F (350°C ± 10°C).  
In case of using high temperature soldering iron, please be careful not to heat too long.
- Pb free solder will tend to splash when heated too high (about 1100°F/ 600°C).
- All products with the printed circuit board with PbF printing must be serviced with lead free solder.  
When soldering or unsoldering, completely remove all of the solder from the pins or solder area,  
and be sure to heat the soldering points with the lead free solder until it melts sufficiently.

### Recommendations

Recommended lead free solder composition is Sn-3.0Ag-0.5Cu.



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## GENERAL SPECIFICATIONS

G-1	TV System	LCD	LCD Size / Visual Size	31.51 inch / 800.4mmV
			LCD Type	Color TFT LCD
			Number of Pixels	1366(H) x 768(V)
			View Range	89/89 degree
			Left/Right Up/Down	89/89 degree
			Bright Dot	n ≤ 0
			Zero Bright Dot Ratio	--
G-2	Tuning System	Color System		PAL / SECAM
		Speaker		2 Speaker
			Position	Front
			Size	2.2 x 5.0 inch
			Impedance	4 ohm
		Sound Output	MAX	10W + 10W
			10%(Typical)	---
		NTSC3.58+4.43 / PAL60Hz		Yes
		Broadcasting System	Analog	U.K., I.R., CCIR, FRENCH System
			Digital	B/G, D/K, I/I, L
		Tuner and Receive CH	System	DVB-T (OFDM 2k/8k 16QAM/64QAM)
G-3	Power	CH Coverage	Destination	1Tuner (Analog+Digital)
			Analog	UK, I.R., CCIR Hyper+France CATV
			Digital	IreE2-E4, X-Z+2, S1-S10, E5-E12,S11-S41,E21-E69
		Intermediate Frequency	Analog	E5-E12, ItaE-G, F1-F6, Rus6-12, E21-E69
			Digital	BG / II / DK, L / L' (SECAM VL)
			Picture(FP)	38.9 / 38.9 / 38.9 / 33.9MHz
			Sound(FS)	33.4 / 32.9 / 32.4 / 40.4MHz
			FP-FS	5.5 / 6.0 / 6.5 / 6.5MHz
			Digital	36.167MHz
		Auto Tuning Method		ALL Band (Not C.C.I.R. CH Plan)
		Preset CH	Analog	99
G-4	Regulation		Digital	Carrier 200 / Service 1000
		Stereo/Dual TV Sound		Nicam/A2 Dual
		Tuner Sound Muting		Yes
		Power Source	AC	220-240V AC 50Hz/60Hz
			DC	---
G-5	Temperature	Power Consumption	at AC	160 W at AC 230 V 50 Hz
			at DC	--
		Stand by (at AC)	w/ EPG Timer	9 W at 230V 50Hz
			w/o EPG Timer	1 W at 230V 50Hz
			Per Year	-- kWh/Year
G-6	Protector		Power Fuse	Yes
			Safety	CE(EN60065:2002)
			Radiation	CE
G-7	X-Radiation			---
G-8	Operating Humidity			
				Less than 80% RH
G-9	OSD Language			English, Spanish, German, French, Italian, Swedish, Dutch, Russian, Portuguese, Turkish, Greek, Finnish, Polish
G-10	Clock and Timer	Sleep Timer	Max Time	120 Min
			Step	10 Min
		On/Off Timer	Program(On Timer / Off Timer)	-- Program
		Wake Up Timer		No
		Timer Back-up (at Power Off Mode)	more than	-- Min Sec

## GENERAL SPECIFICATIONS

G-9	Remote Control	Unit	RC-NV
		Glow in Dark Remocon	Yes
		Remocon Format	ORION
		Format	NEC
		Custom Code	80-63 h
		Power Source	3V
		Voltage(D.C)	UM-3 x 2 pcs
		UM size x pcs	42 Keys
		Total Keys	
		Keys	
		Power (Stand By)	Yes
		Display / (Status)	Yes
		Analog Menu	Yes
		Digital Menu	Yes
		Input Select	Yes
		TV/DVB-T	Yes
		Guide	Yes
		Picture Size	Yes
		1	Yes
		2	Yes
		3	Yes
		4	Yes
		5	Yes
		6	Yes
		7	Yes
		8	Yes
		9	Yes
		0	Yes
		Sleep	Yes
		Mute	Yes
		Volume Up	No
		Volume Down	No
		Volume Up	Yes
		Volume Down	Yes
		CH Down	No
		CH Up	No
		Menu	No
		Up	Yes
		Down	Yes
		LEFT	Yes
		RIGHT	Yes
		Enter / CH List	Yes
		Exit	Yes
		Freeze frame	No
		TV/Radio	Yes
		Subtitle	Yes
		T'TEXT Keys	
		TEXT / TAP / TV	Yes
		Reveal / Skip	No
		Reveal	Yes
		Display Cancel	No
		HOLD / Freeze	Yes
		Red	Yes
		Green	Yes
		Yellow	Yes
		Cyan	Yes
		Normal	No
		F/T/B(Expand)	Yes
		F/T/B(Expand) / Normal	No
		Quick View	No
		Sub Page / Quick View	Yes
		Up/CH Up	No
		CH Up / Page Up	No
		CH Up / Page Up	Yes
		Down / CH Down	No
		CH Down / Page Down	No
		CH Down / Page Down	Yes
		Reset	No
		Audio 1/2	Yes
		Reset / Audio 1/2	No

## GENERAL SPECIFICATIONS

G-10	Features	Power On Memory	No
		Auto Shut Off	Yes
		Just Clock Function	No
		Game Position	No
		DNR	Yes
			3D
		Comb Filter	Yes
			3D
		Auto Set Up (Fast installation)	Yes
		Auto tuning (Analog tuner)	Yes
		CH sort	Yes
		ATS	Yes
		Auto clock (Analog tuner)	No
		Plug in start	Yes
		Picture Setting(TV)	Picture Preference
			Yes
		Brightness , Contrast , Color	Yes
		Tint	Yes
		Sharpness	Yes
		DNR	Yes
		Color Temperature	Yes
		Blue Back	Yes
		Backlight Control	Yes
		Film Mode	No
		Picture Setting(PC)	BRIGHTNESS , CONTRAST
			Yes
		HOR POSITION , VER POSITION	Yes
		PHASE , CLOCK	Yes
		AUTO ADJUST	No
		RED , GREEN , BLUE	Yes
		Backlight	Yes
		WXGA INPUT	Yes
		WVGA INPUT	No
		Audio	Nicam
			Yes
		Tone Control (Bass/Treble/Balance)	Yes
		Surround	Yes
		BBE	No
		SRS WOW (SRS 3D/Focus/Tru Bass)	No
		Variable Audio Out	Yes
		Tuning	Auto Tuning
			Yes
		Manual Tuning	Yes
		CH Allocation	Yes
		Lock (Analog)	Panel Lock
			No
		Channel Lock	No
		Hotel Lock	No
		Screen Saver	Inversion
			No
		Full White	No
		Screen Saver	No
		Static Image	No
		Black Side Panel	No
		CH Label	Yes
		T'Text	Yes
		Text type	Fasttext / Toptext
		Text Language	English , French, Swedish, Hungarian Turkish, German, Portuguese, Spanish, Italian, Greek, Slovakian, Russian, Polish, Czech, Rumanian, Estonian, Lettish, Lithuanian, Ukrainian, Croatian, Slovenian, Latvian
		Wide Mode (AUTO/4:3/FULL SCREEN/16:9/CINEMA/14:9)	Yes
		HD Zoom	Yes
		Picture Scroll (Vertical Position)	Yes
		PFC(Power Factor circuit)	Yes
		Freeze frame	Yes (w/o720p, 1080i)
		HD-Ready	Yes
		Plug and Play	No
		Scart Spec	Scart1
		AV in	Yes
		AV out	Yes (A.Tuner/D.Tuner)
		S-Video in	Yes
		RGB in	Yes

## GENERAL SPECIFICATIONS

Scart2	AV in	Yes
	AV out	Yes (Monitor)
	S-Video in	Yes
	RGB in	Yes
Digital Text (VBI teletext)		Yes
MHEG-5		Yes
MHP		No
EPG (BBC type 8Days Digital tuner only)		Yes
OAD (Over Air Download)		Yes
Common Interface (Digital tuner only)		Yes
Rec Screen Status		Yes
Ch sorting based on Ch List (Digital/Germany only)		Yes
Rename Carrier (Digital)		Yes
Edit Event Timer		Yes
Software Update via CI Slot		Yes
Preference Language (Audio/Subtitle/Digital Service)(Digital)		Yes
Ch Organizer (Fav, Lock, Skip, Go To, Delete, Rename, Move, Move to)		Yes
Parental Lock (Digital)		Yes
DVB Subtitle (Digital)		Yes
PC Monitor Input		Yes
	VGA (640x480)	Yes (60Hz)
	VGA (720x400)	Yes (70Hz)
	WVGA (848x480)	No
	SVGA (800x600)	Yes (60Hz)
	XGA (1024x768)	Yes (60Hz)
	WXGA (1280x768)	Yes (60Hz)
	WXGA (1280x720)	Yes (60Hz)
	WXGA (1360x768)	Yes (60Hz)
	SXGA (1280x1024)	No
	HDMI Input	
	VGA (640x480)	Yes (60Hz)
	720x480i (4:3)	Yes (60Hz)
	720x480i (16:9)	Yes (60Hz)
	720x480p (4:3)	Yes (60Hz)
	720x480p (16:9)	Yes (60Hz)
	720x576i (4:3)	Yes (50Hz)
	720x576i (16:9)	Yes (50Hz)
	720x576p (4:3)	Yes (50Hz)
	720x576p (16:9)	Yes (50Hz)
	1280x720p	Yes (50/60Hz)
	1920x1080i	Yes (50/60Hz)
Component Input		Yes
	720x480i (4:3)	Yes (60Hz)
	720x480i (16:9)	Yes (60Hz)
	720x480p (4:3)	Yes (60Hz)
	720x480p (16:9)	Yes (60Hz)
	720x576i (4:3)	Yes (50Hz)
	720x576i (16:9)	Yes (50Hz)
	720x576p (4:3)	Yes (50Hz)
	720x576p (16:9)	Yes (50Hz)
	1280x720p	Yes (50/60Hz)
	1920x1080i	Yes (50/60Hz)

## GENERAL SPECIFICATIONS

G-11	Accessories	Owner's Manual	Language	English/German/French/Spanish/Italian/Dutch/Czech
			w/Guarantee Card	Yes (except English)
		Remote Control Unit		Yes
		Rod Antenna		No
			Poles	-
			Terminal	-
		Loop Antenna (W/ Antenna Change Plug)		No
			Terminal	-
		U/V Mixer		No
		DC Car Cord (Center+)		No
		Guarantee Card		No
		Warning Sheet		No
		Circuit Diagram		No
		Antenna Change Plug		No
		Service Facility List		No
		Important Safeguard		No
		Quick Set-up Sheet		Yes
		Battery		Yes
			UM size x pcs	UM-3 x 2 pcs
			OEM Brand	No
		AC Adapter		No
		AC Cord (for AC Adapter)		No
		AC Cord		Yes
		AV Cord (2Pin-1Pin)		No
		HDMI-DVI Cable		No
		Registration Card		No
		300 ohm to 75 ohm Antenna Adapter		No
G-12	Interface	Switch	Power (Tact)	Yes
			System Select	No
			Main Power SW	No
			Channel Up/Menu Up	Yes
			Channel Down/Menu Down	Yes
			Volume Up/Menu >	Yes
			Volume Down/Menu <	Yes
			Input Select/Enter	Yes
		Indicator	Menu	Yes
			Power/Stand-by/EPG Timer	Yes(GREEN / RED / ORANGE)
			On Timer	No
		Terminals      Side	Video Input 1	RCA x 1
			Audio Input 1	RCA x 2(L/MONO, R)
			S- Input 1	Yes
			Video Input 2	No
			Audio Input 2	No
			S- Input 2	No
			Video Output	No
			Audio Output	RCA x 2(Variable) (L, R)
			Digital Audio Out (Coaxial)	Yes
			Other Terminal	No
			Euro Scart (21Pin)	2Scart
			Component In	Yes
			Audio Input (Component In use)	RCA x 2(L/MONO, R)
			PC Monitor Input (D-Sub)	Yes
			Audio Input	Mini Pin Jack(ø 3.5), STEREO
			HDMI Input 1	Yes
			Audio Input (HDMI/DVI In use)	PC Monitor Audio Input Alternative
			HDMI Input 2	Yes
			Audio Input (HDMI/DVI In use)	Mini Pin Jack(ø 3.5), STEREO
			Sub Woofer Output	No
			Diversity	No
			Ext Speaker	No
			DC Jack 12V(Center +)	No
			VHF/UHF Antenna Input	DIN Type
			AC Inlet	Yes
			Other Terminal	Headphone
			CI Card Slot	Yes
G-13	Set Size		Approx.    W x D x H (mm)	796.5 x 282 x 581
			w/o Stand,Handle Approx.    W x D x H (mm)	796.5 x 116 x 534

## GENERAL SPECIFICATIONS

G-14	Weight		Net Approx.	13.2kg (29.1 lbs)
			Net w/o Stand,Handle Approx.	12.0kg (26.5 lbs)
			Gross Approx.	16.5kg (36.4 lbs)
G-15	Carton	Master Carton		No
			Content	--- Sets
			Material	-- /--
			Dimensions W x D x H(mm)	-- x -- x --
		Gift Box	Description of Origin	No
				Yes
			Material	Double/Brown
			Dimensions W x D x H(mm)	917 x 340 x 700
			Design	As per Buyer's
			Description of Origin	No
			Drop Test	Natural Dropping At 1 Corner / 3 Edges / 6 Surfaces
			Height (cm)	62
			Container Stuffing	261 Sets/40' container
G-16	Material	Cabinet	Cabinet Front	PC+ABS 94V0 NON-HALOGEN
			Cabinet Rear	'PS 94HB
		PCB	Non-Halogen	No
			Eyelet	Yes
G-17	Environment	Environmental standard requirement		Green procurement of ORION
		Pb- Free		Phase3(PHASE3A)
		Measures for Whisker		Yes
		WEEE		Yes

## DISASSEMBLY INSTRUCTIONS

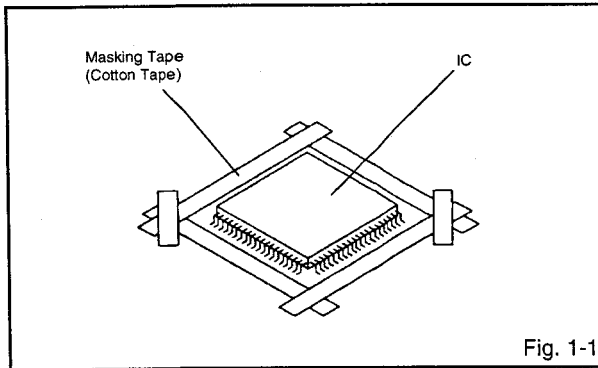
### 1. REMOVAL AND INSTALLATION OF FLAT PACKAGE IC

#### REMOVAL

1. Put Masking Tape (cotton tape) around the Flat Package IC to protect other parts from any damage. (Refer to Fig. 1-1.)

#### NOTE

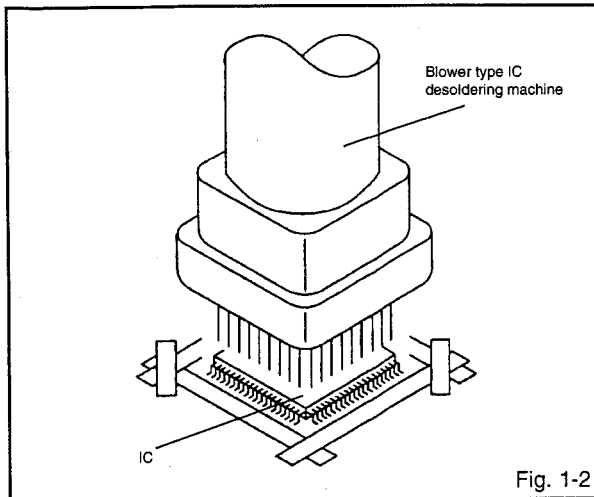
Masking is carried out on all the parts located within 10 mm distance from IC leads.



2. Heat the IC leads using a blower type IC desoldering machine. (Refer to Fig. 1-2.)

#### NOTE

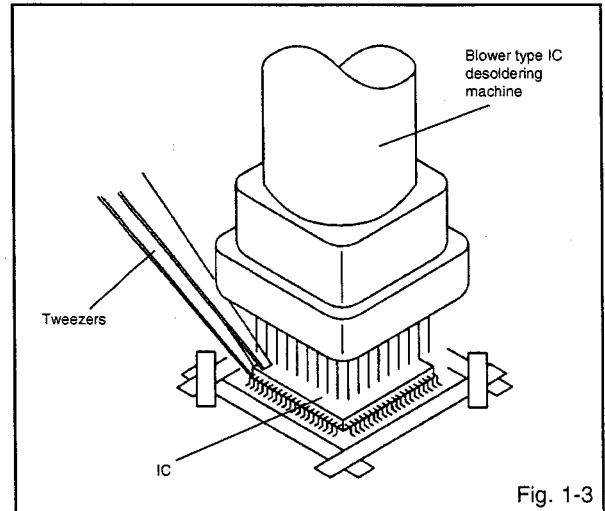
Do not rotate or move the IC back and forth until IC can move back and forth easily after desoldering the leads completely.



3. When IC starts moving back and forth easily after desoldering completely, pickup the corner of the IC using tweezers and remove the IC by moving with the IC desoldering machine. (Refer to Fig. 1-3.)

#### NOTE

Some ICs on the PCB are affixed with glue, so be careful not to break or damage the foil of each IC leads or solder lands under the IC when removing it.

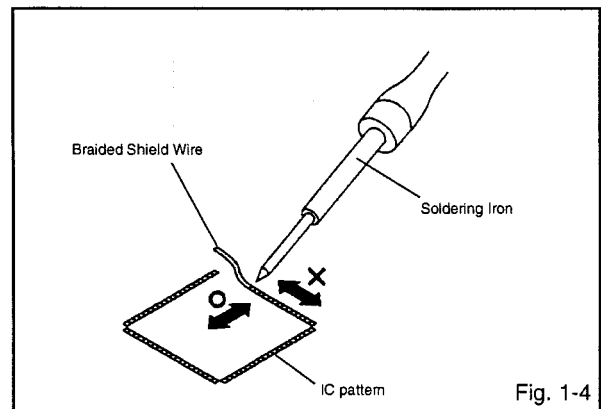


4. Peel off the Masking Tape.

5. Absorb the solder left on the pattern using the Braided Shield Wire. (Refer to Fig. 1-4.)

#### NOTE

Do not move the Braided Shield Wire in the vertical direction towards the IC pattern.

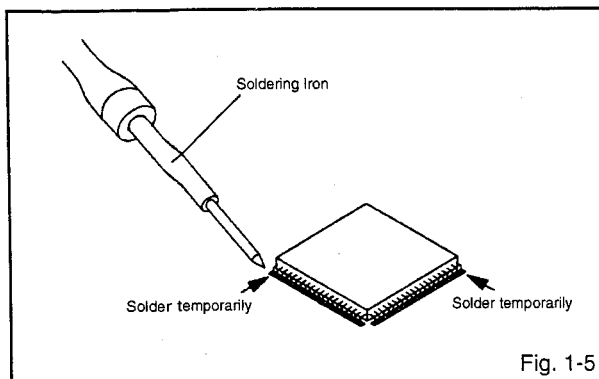




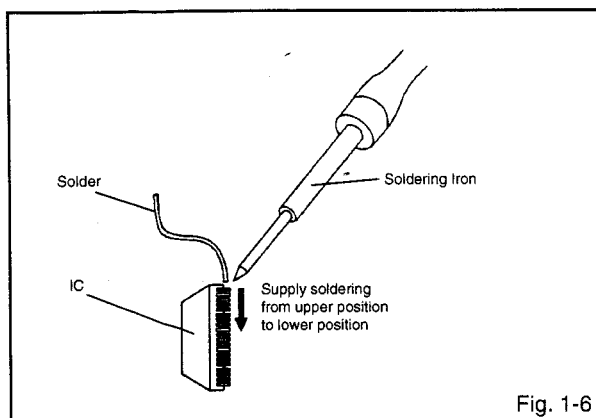
## DISASSEMBLY INSTRUCTIONS

### INSTALLATION

1. Take care of the polarity of new IC and then install the new IC fitting on the printed circuit pattern. Then solder each lead on the diagonal positions of IC temporarily. (Refer to Fig. 1-5.)



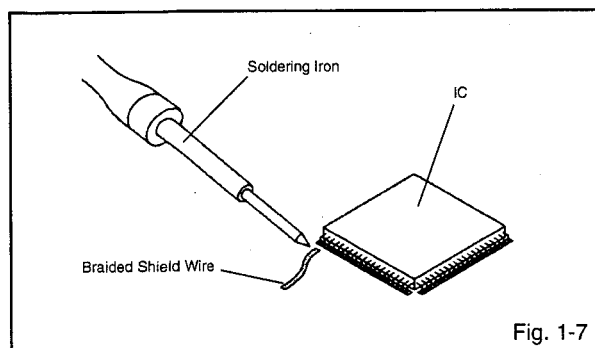
2. Supply the solder from the upper position of IC leads sliding to the lower position of the IC leads. (Refer to Fig. 1-6.)



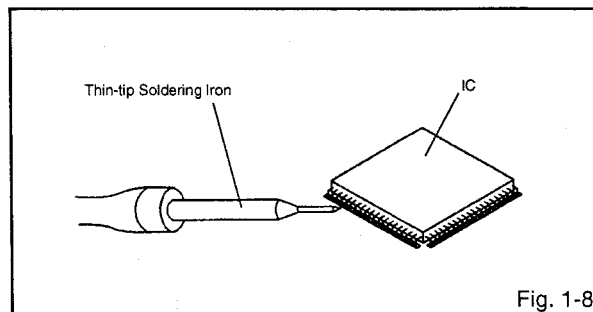
3. Absorb the solder left on the lead using the Braided Shield Wire. (Refer to Fig. 1-7.)

#### NOTE

Do not absorb the solder to excess.



4. When bridge-soldering between terminals and/or the soldering amount are not enough, resolder using a Thin-tip Soldering Iron. (Refer to Fig. 1-8.)



5. Finally, confirm the soldering status on four sides of the IC using a magnifying glass.

Confirm that no abnormality is found on the soldering position and installation position of the parts around the IC. If some abnormality is found, correct by resoldering.

#### NOTE

When the IC leads are bent during soldering and/or repairing, do not repair the bending of leads. If the bending of leads are repaired, the pattern may be damaged. So, always be sure to replace the IC in this case.

## SERVICE MODE LIST

This unit is provided with the following SERVICE MODES so you can repair, examine and adjust easily.

To enter to the SERVICE MODE function, press and hold both buttons simultaneously on the main unit and on the remote control for more than the standard time in the appropriate condition. (See below chart.)

Set Condition	Set Key	Remocon Key	Standard Time	Operations
POWER ON	VOL. DOWN (Minimum)	1	2 sec.	Initialization of factory TV data. NOTE: If you set factory initialization, the memories are reset such as the channel setting, and the POWER ON total hours.
POWER ON	VOL. DOWN (Minimum)	2	2 sec.	Check of the SUM DATA and MICON VERSION on the screen. Refer to the "WHEN REPLACING EEPROM (MEMORY) IC".
DTV mode	VOL. DOWN (Minimum)	3	2 sec.	InitializAtion of password of PARENTAL LOCK (DIGITAL). Refer to the "PARENTAL CONTROL-RATING LEVEL".
POWER ON	VOL. DOWN (Minimum)	6	2 sec.	POWER ON total hours are displayed on the screen. Can be checked of the INITIAL DATA of MEMORY IC. Refer to the "WHEN REPLACING EEPROM (MEMORY) IC".
POWER ON	VOL. DOWN (Minimum)	9	2 sec.	Display of the Adjustment MENU on the screen. Refer to the "ELECTRICAL ADJUSTMENT" (On-Screen Display Adjustment).

## WHEN REPLACING EEPROM (MEMORY) IC

### CONFIRMATION OF CHECK SUM, MICON VERSION AND DIGITAL TV MICON FIRMWARE AND POWER ON TOTAL HOURS

Initial total of MEMORY IC, MICON VERSION, Digital TV MICON Firmware and POWER ON TOTAL HOURS can be checked on the screen. Total hours are displayed in 16 system of notation.

**NOTE: If you set a factory initialization, the total hours is reset to "0".**

**Please refer to "CONFIRMATION OF INITIAL DATA" when SUM DATA is not corresponding.**

1. Turn on the POWER, and set to the TV mode.
2. Set the VOLUME to minimum.
3. Press both VOL. DOWN button on the set and Channel button (2) on the remote control for more than 2 seconds.
4. After the confirmation of MICON VERSION and Digital TV MICON Firmware, turn off the power.  
ADDRESS and DATA should appear as FIG 1.

**NOTE:** The each item value might be different according to each set.

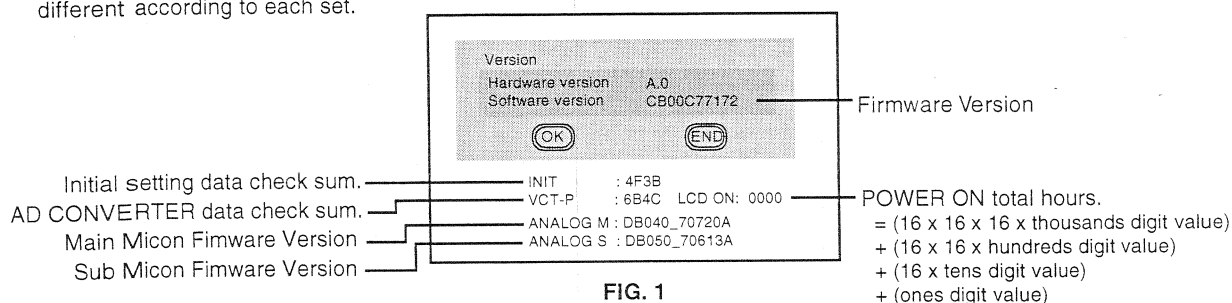


FIG. 1

### CONFIRMATION OF INITIAL DATA

If a service repair is undertaken where it has been required to change the MEMORY IC, the following steps should be taken to ensure correct data settings while making reference to INITIAL SETTING TABLE (Attached "INITIAL DATA").

1. Turn on the POWER, and set to the TV mode.
2. Set the VOLUME to minimum.
3. Press both VOL. DOWN button on the set and Channel button (6) on the remote control for more than 2 seconds.  
ADDRESS and DATA should appear as FIG 2.

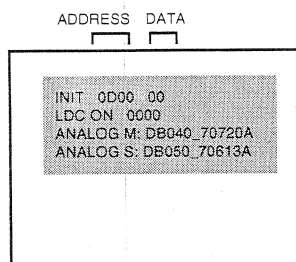


FIG. 2

4. ADDRESS is now selected and should "blink". Using the UP/DOWN button on the remote, step through the ADDRESS until required ADDRESS to be changed is reached.
5. Press LEFT/RIGHT button to select DATA. When DATA is selected, it will "blink".
6. Again, step through the DATA using UP/DOWN button until required DATA value has been selected.
7. Pressing LEFT/RIGHT button will take you back to ADDRESS for further selection if necessary.
8. Repeat steps 4 to 6 until all data has been checked.
9. When satisfied correct DATA has been entered, turn POWER off (return to STANDBY MODE) to finish DATA input.

**After the data input, set to the initializing of shipping.**

10. Turn on the POWER on.
11. Set the VOLUME to minimum.
12. Press both VOL. DOWN button on the set and Channel button (1) on the remote control for more than 2 seconds.
13. After the finishing of the initializing of shipping, the unit will turn off automatically.  
The unit will now have the correct DATA for the new MEMORY IC.

## WHEN REPLACING EEPROM (MEMORY) IC

### CONFIRMATION OF CHECK SUM, MICON VERSION AND DIGITAL TV MICON FIRMWARE AND POWER ON TOTAL HOURS

Initial total of MEMORY IC, MICON VERSION, Digital TV MICON Firmware and POWER ON TOTAL HOURS can be checked on the screen. Total hours are displayed in 16 system of notation.

**NOTE: If you set a factory initialization, the total hours is reset to "0".**

**Please refer to "CONFIRMATION OF INITIAL DATA" when SUM DATA is not corresponding.**

1. Turn on the POWER, and set to the TV mode.
2. Set the VOLUME to minimum.
3. Press both VOL. DOWN button on the set and Channel button (2) on the remote control for more than 2 seconds.
4. After the confirmation of MICON VERSION and Digital TV MICON Firmware, turn off the power.  
ADDRESS and DATA should appear as FIG 1.

**NOTE:** The each item value might be different according to each set.

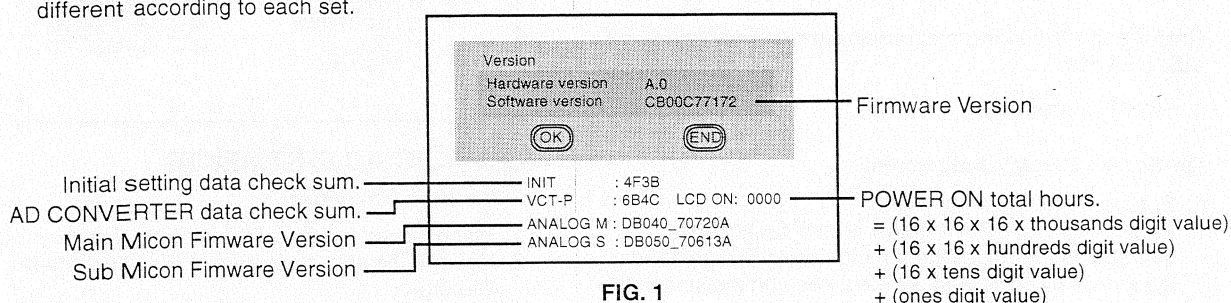


FIG. 1

### CONFIRMATION OF INITIAL DATA

If a service repair is undertaken where it has been required to change the MEMORY IC, the following steps should be taken to ensure correct data settings while making reference to INITIAL SETTING TABLE (Attached "INITIAL DATA").

1. Turn on the POWER, and set to the TV mode.
2. Set the VOLUME to minimum.
3. Press both VOL. DOWN button on the set and Channel button (6) on the remote control for more than 2 seconds.  
ADDRESS and DATA should appear as FIG 2.

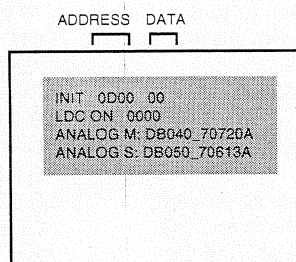


FIG. 2

4. ADDRESS is now selected and should "blink". Using the UP/DOWN button on the remote, step through the ADDRESS until required ADDRESS to be changed is reached.
5. Press LEFT/RIGHT button to select DATA. When DATA is selected, it will "blink".
6. Again, step through the DATA using UP/DOWN button until required DATA value has been selected.
7. Pressing LEFT/RIGHT button will take you back to ADDRESS for further selection if necessary.
8. Repeat steps 4 to 6 until all data has been checked.
9. When satisfied correct DATA has been entered, turn POWER off (return to STANDBY MODE) to finish DATA input.

**After the data input, set to the initializing of shipping.**

10. Turn on the POWER on.
11. Set the VOLUME to minimum.
12. Press both VOL. DOWN button on the set and Channel button (1) on the remote control for more than 2 seconds.
13. After the finishing of the initializing of shipping, the unit will turn off automatically.  
The unit will now have the correct DATA for the new MEMORY IC.

# ELECTRICAL ADJUSTMENTS

## 1. ADJUSTMENT PROCEDURE

Read and perform these adjustments when repairing the circuits or replacing electrical parts or PCB assemblies.

### CAUTION

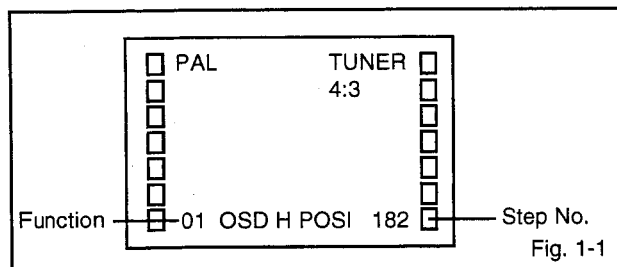
- Use an isolation transformer when performing any service on this chassis.
- When removing a PCB or related component, after unfastening or changing a wire, be sure to put the wire back in its original position.
- When you exchange IC and Transistor with a heat sink, apply silicon grease (**YG6260M**) on the contact section of the heat sink. Before applying new silicon grease, remove all the old silicon grease. (Old grease may cause damages to the IC and Transistor).

Prepare the following measurement tools for electrical adjustments.

1. Pattern Generator

### On-Screen Display Adjustment

1. Set the VOLUME to minimum.
2. Press the VOL. DOWN button on the set and the channel button (9) on the remote control for more than 2 seconds to display adjustment mode on the screen as shown in **Fig. 1-1**.



3. Use the UP/DOWN button or Channel button (0-9) on the remote control to select the options shown in **Fig. 1-2**.
4. Press the INPUT SELECT button on the remote control to end the adjustments.
5. To display the adjustment screen for TUNER, AV, COMPONENT, HDMI and PC mode, press the INPUT SELECT button on the remote control to set to the TUNER, AV, COMPONENT, HDMI and PC mode. Press the VOL.DOWN button on the set and the channel (9) on the remote control for more than 2 seconds.

NO.	FUNCTION	NO.	FUNCTION
01	OSD H POSI	23	H POSI MIN
02	OSD V POSI	24	V POSI
03	R DRIVE(N)	25	V POSI MAX
04	R CUT OFF(N)	26	V POSI MIN
05	G DRIVE(N)	27	BACKLIGHT CENTER
06	G CUT OFF(N)	28	BACKLIGHT MAX
07	B DRIVE(N)	29	BACKLIGHT MIN
08	B CUT OFF(N)	30	BRIGHT CENTER
09	R DRIVE(C)	31	BRIGHT MAX
10	R CUT OFF(C)	32	BRIGHT MIN
11	G DRIVE(C)	33	TINT CENTER
12	G CUT OFF(C)	34	CONTRAST CENTER
13	B DRIVE(C)	35	CONTRAST MAX
14	B CUT OFF(C)	36	CONTRAST MIN
15	R DRIVE(W)	37	CONTRAST 40
16	R CUT OFF(W)	38	COLOR CENTER
17	G DRIVE(W)	39	COLOR MAX
18	G CUT OFF(W)	40	COLOR MIN
19	B DRIVE(W)	41	TEXT H POSI
20	B CUT OFF(W)	42	TEXT V POSI
21	H POSI	43	FLICKER ADJ
22	H POSI MAX		

Fig. 1-2

## 2. BASIC ADJUSTMENTS

### 2-1: WHITE BALANCE

1. Place the set in Aging Test for more than 15 minutes.
2. Receive the gray scale pattern from the Pattern Generator.
3. Press the INPUT SELECT button on the remote control to set to the AV mode.
4. Using the remote control, set the brightness and contrast to normal position.
5. Activate the adjustment mode display of **Fig. 1-1** and press the channel button (03) on the remote control to select "R DRIVE(N)".
6. Press the CH. UP/DOWN button on the remote control to select the "R DRIVE(N)", "R CUT OFF(N)", "G DRIVE(N)", "G CUT OFF(N)", "B DRIVE(N)", "B CUT OFF(N)", "R DRIVE(C)", "R CUT OFF(C)", "G DRIVE(C)", "G CUT OFF(C)", "B DRIVE(C)", "B CUT OFF(C)", "R DRIVE(W)", "R CUT OFF(W)", "G DRIVE(W)", "G CUT OFF(W)", "B DRIVE(W)" or "B CUT OFF(W)".
7. Adjust the LEFT/RIGHT button on the remote control to whiten the R DRIVE(N), R CUT OFF(N), G DRIVE(N), G CUT OFF(N), B DRIVE(N), B CUT OFF(N), R DRIVE(C), R CUT OFF(C), G DRIVE(C), G CUT OFF(C), B DRIVE(C), B CUT OFF(C), R DRIVE(W), R CUT OFF(W), G DRIVE(W), G CUT OFF(W), B DRIVE(W) or B CUT OFF(W) at each step tone sections equally.
8. Perform the above adjustments 6 and 7 until the white achieved.

## ELECTRICAL ADJUSTMENTS

### 2-2: CONTRAST MAX

1. Place the set in Aging Test for more than 15 minutes.
2. Receive the color bar pattern. (RF Input)
3. Using the remote control, set the brightness and contrast to normal position.
4. Activate the adjustment mode display of **Fig. 1-1** and press the channel button **(35)** on the remote control to select "CONTRAST MAX".
5. Press the LEFT/RIGHT button on the remote control
6. until the contrast step No. becomes "49".
7. Check if the picture is normal.
8. Receive the color bar pattern. (VIDEO Input)
9. Using the remote control, set the brightness and contrast to normal position.
10. Press the INPUT SELECT button on the remote control to set to the AV mode.
11. Activate the adjustment mode display of **Fig. 1-1** and press the channel button **(35)** on the remote control to select "CONTRAST MAX".
12. Press the LEFT/RIGHT button on the remote control until the contrast step No. becomes "49".
13. Check if the picture is normal.
14. Receive the color bar pattern. (AV RGB Input)
15. Using the remote control, set the brightness and contrast to normal position.
16. Press the INPUT SELECT button on the remote control to set to the AV(RGB) mode. Then perform the above adjustments 11~13.
17. Receive the color bar pattern. (S-VIDEO Input)  
Using the remote control, set the brightness and contrast to normal position.
18. Press the INPUT SELECT button on the remote control to set to the AV3(Y/C) mode. Then perform the above adjustments 11~13.
19. Receive the color bar pattern. (COMPONENT Input)
20. Using the remote control, set the brightness and contrast to normal position.
21. Press the INPUT SELECT button on the remote control to set to the COMPONENT mode.
22. Activate the adjustment mode display of **Fig. 1-1** and press the channel button **(35)** on the remote control to select "CONTRAST MAX".
23. Press the LEFT/RIGHT button on the remote control until the contrast step No. becomes "54".
24. Check if the picture is normal.
25. Receive the color bar pattern. (HDMI Input)
26. Using the remote control, set the brightness and contrast to normal position.
27. Press the INPUT SELECT button on the remote control to set to the HDMI mode.
28. Activate the adjustment mode display of **Fig. 1-1** and press the channel button **(35)** on the remote control to select "CONTRAST MAX".
29. Press the LEFT/RIGHT button on the remote control until the contrast step No. becomes "55".
30. Check if the picture is normal.

ELECTRICAL ADJUSTMENTS

2-3: Confirmation of Fixed Value (Step No.)

Please check if the fixed values of each the adjustment item is set correctly referring below. (TUNER/AV/COMPONENT/HDMI/PC/DTV)

Please check if the head values of each the adjustment item is set correctly referring below. (COMPONENT/V/PC/OTHER/NTSC/OTHER/PC/OTHER/																																
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NOTE: For the step no. with \* mark, please adjust it according to the situation of the set.

ELECTRICAL ADJUSTMENTS

2-4: Confirmation of Fixed Value (Step No.)

Please check if the fixed values of each the adjustment item is set correctly referring below. (TUNER/AV)

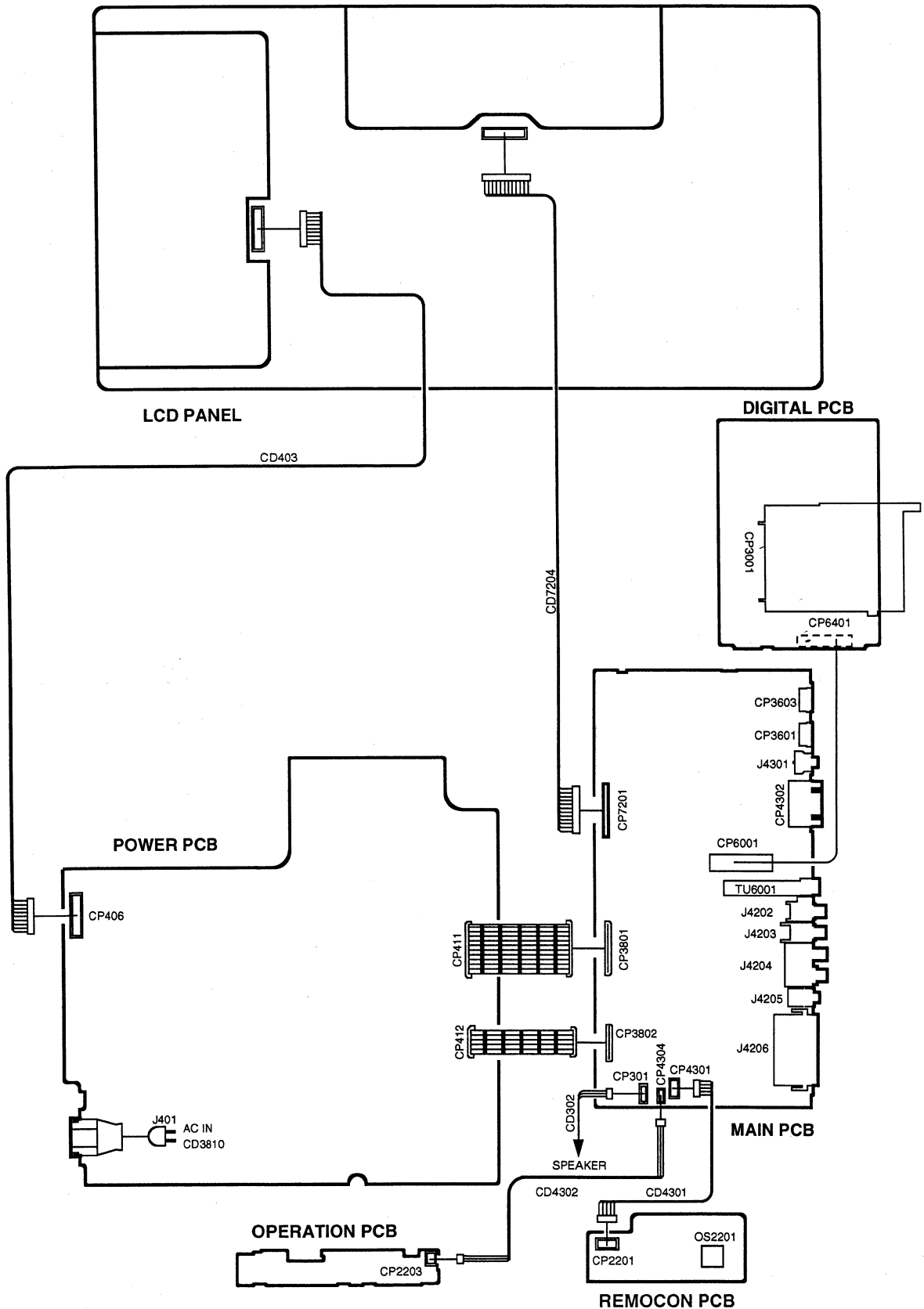
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NOTE: For the step no. with \* mark, please adjust it according to the situation of the set.

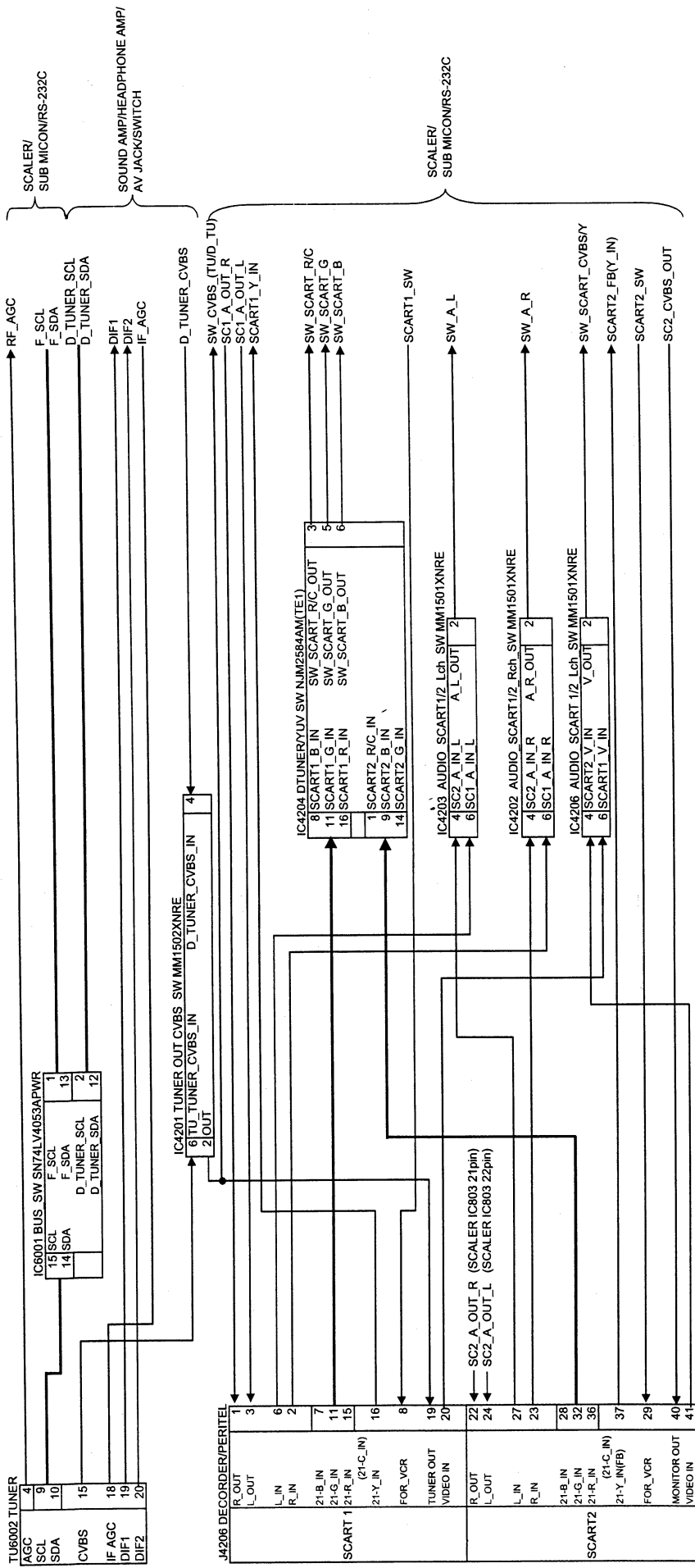


## ELECTRICAL ADJUSTMENTS

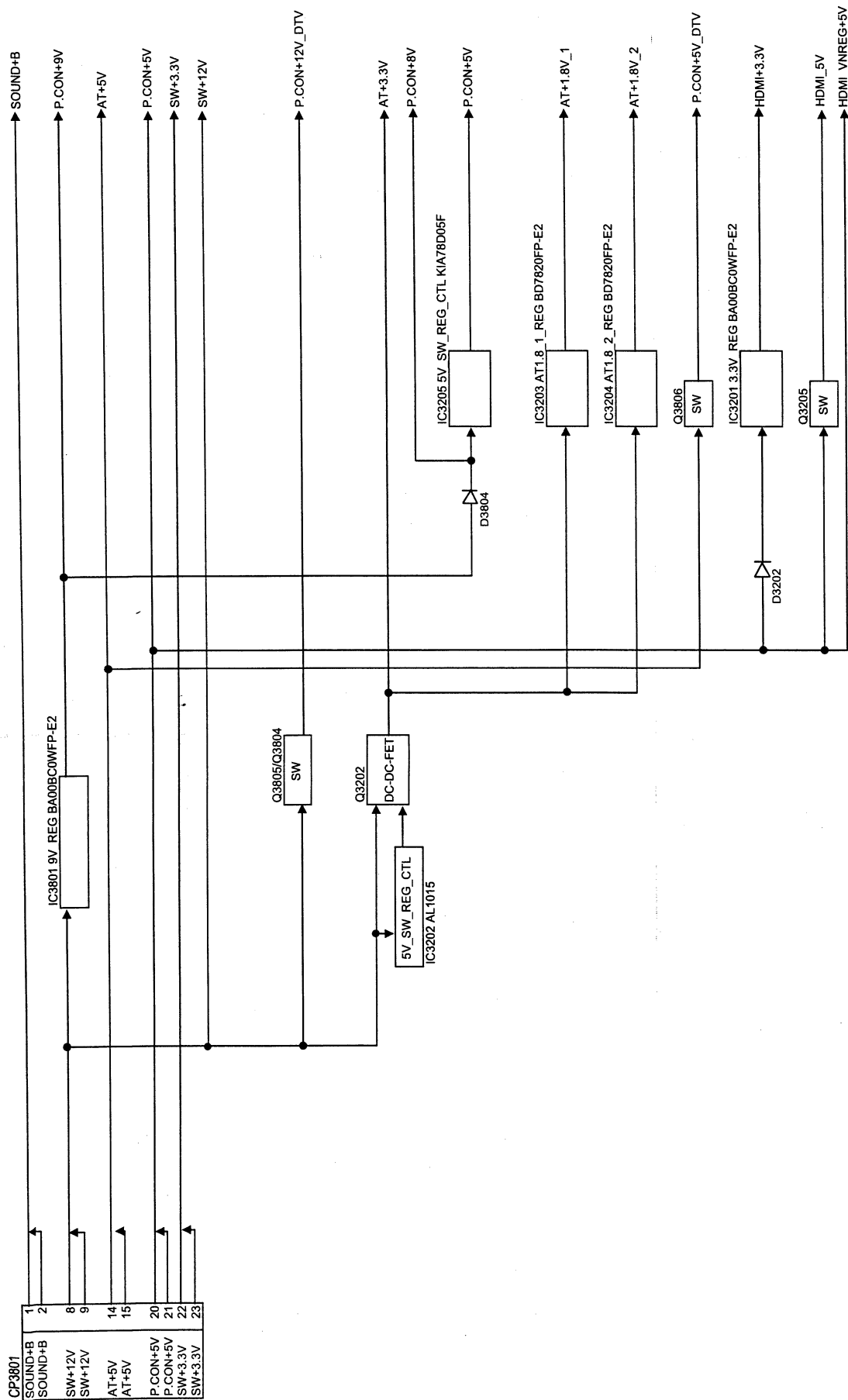
### 3. ELECTRICAL ADJUSTMENT PARTS LOCATION GUIDE (WIRING CONNECTION)



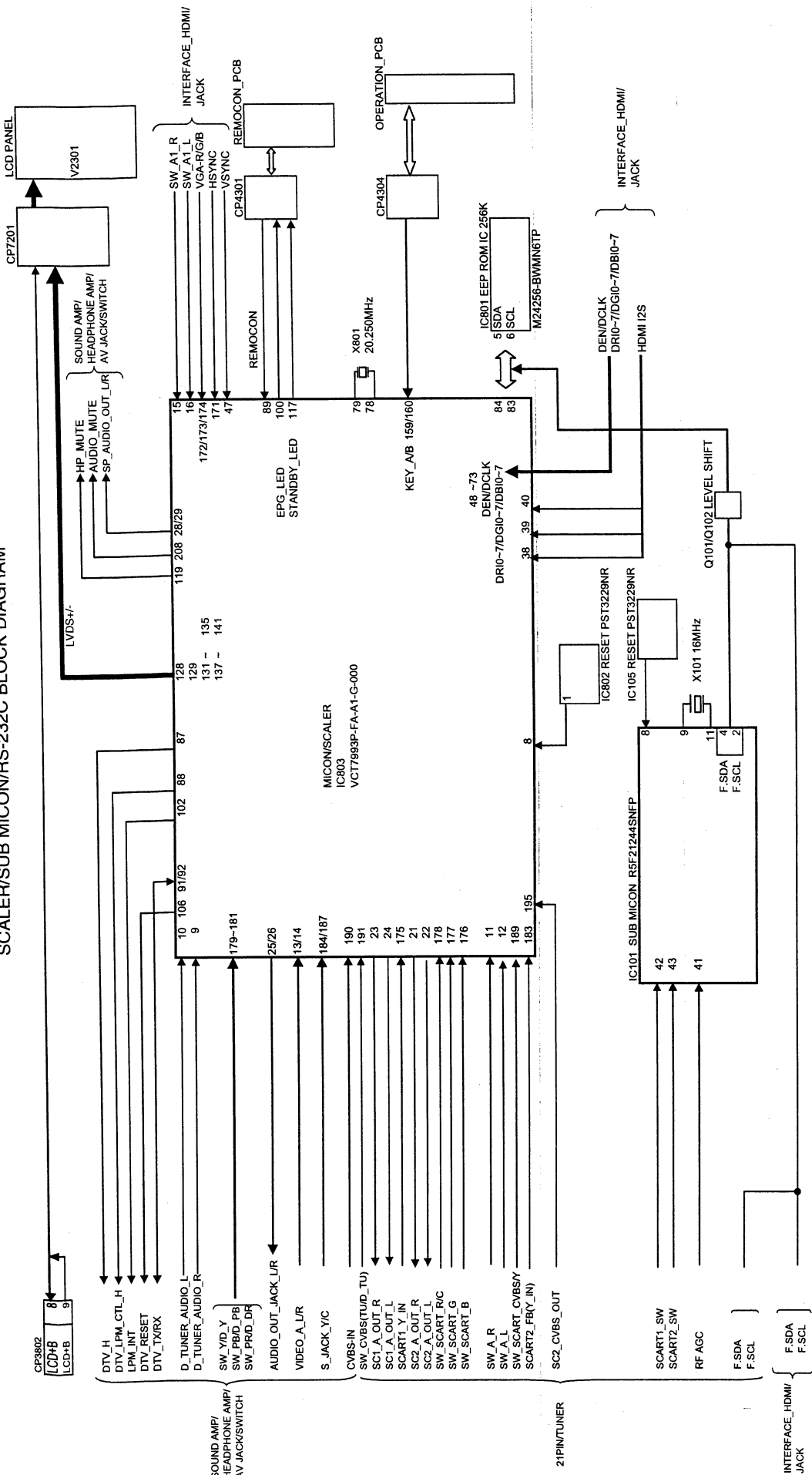
## 21PIN/TUNER BLOCK DIAGRAM



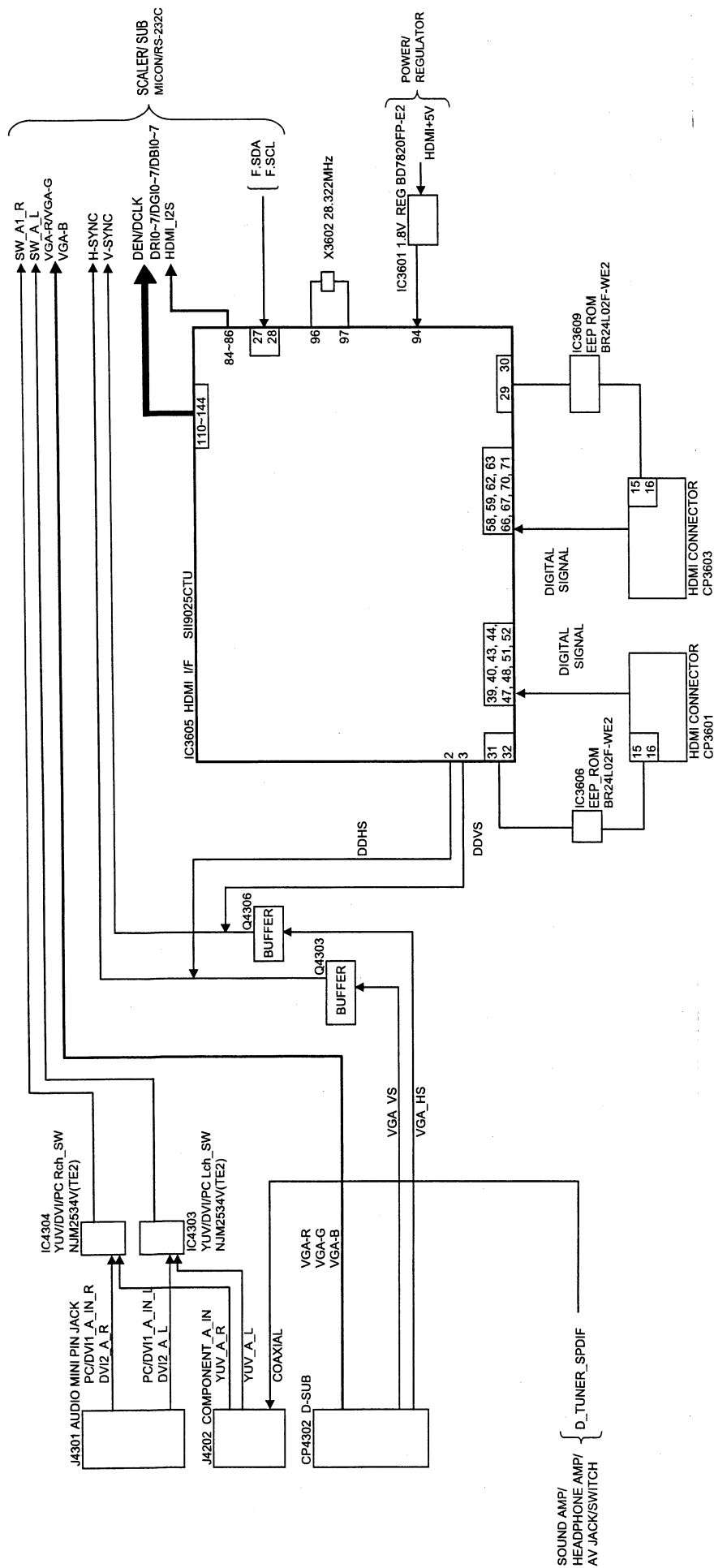
# POWER/REGULATOR BLOCK DIAGRAM



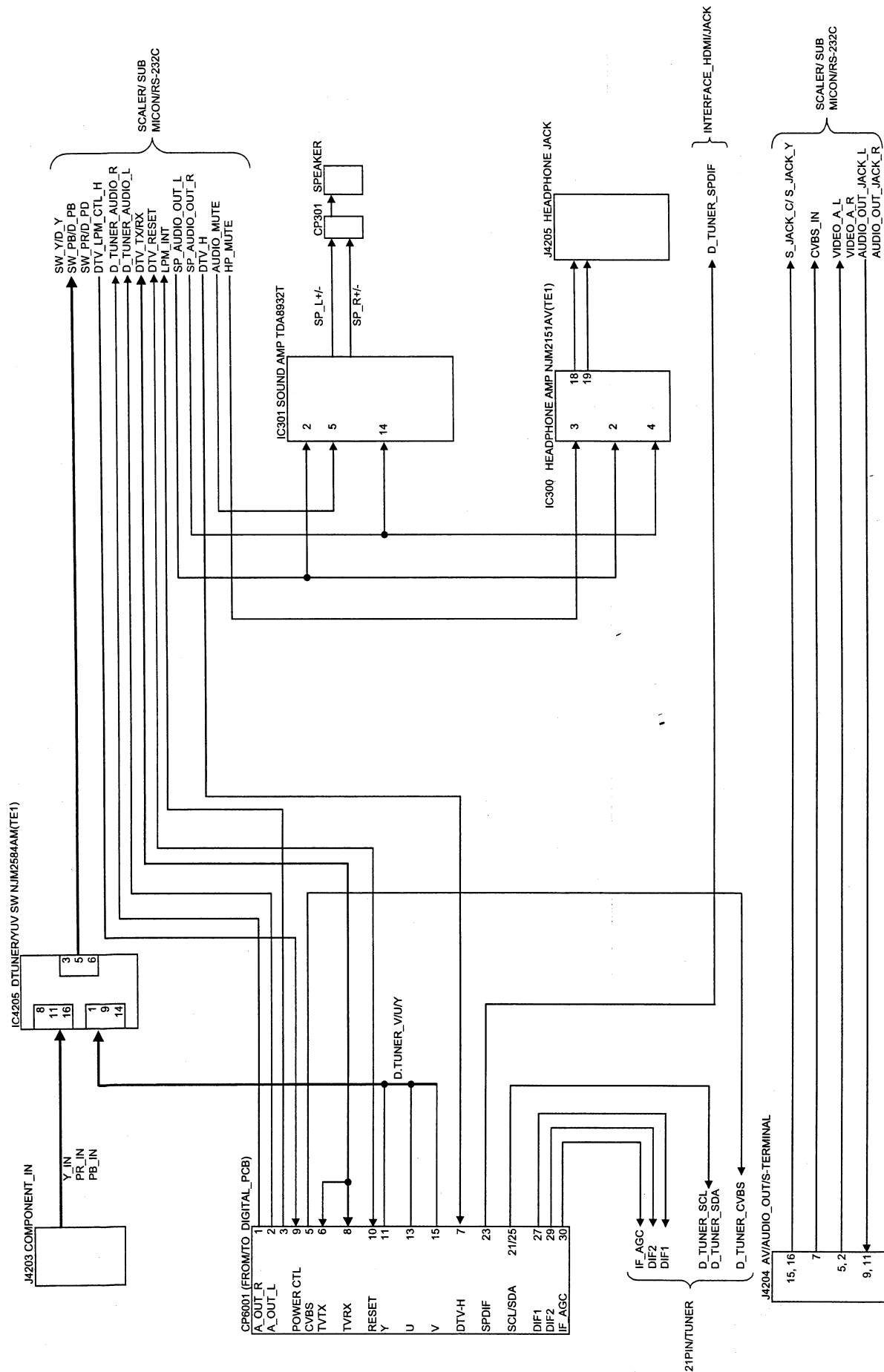
# SCALER/SUB MICON/RS-232C BLOCK DIAGRAM



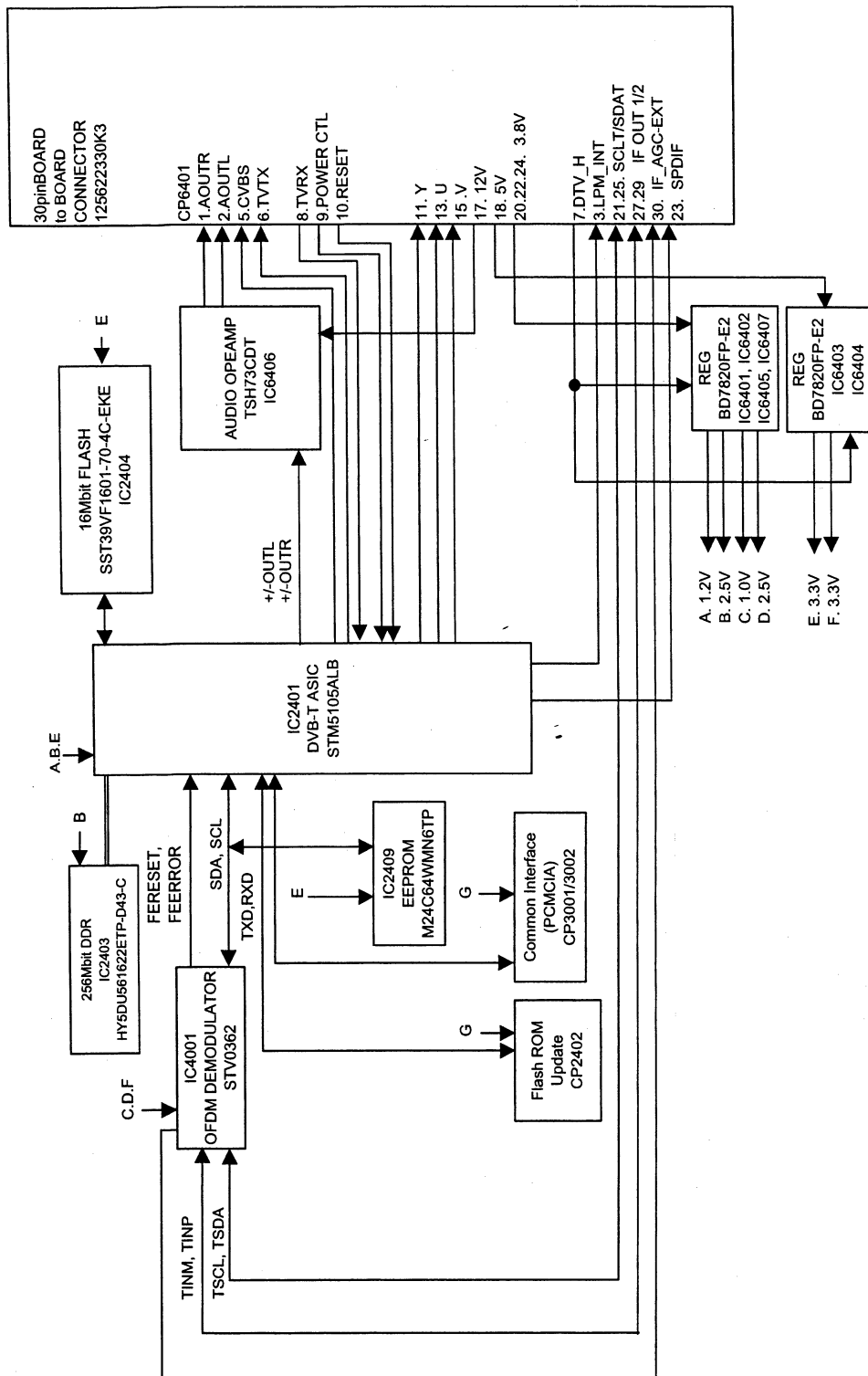
# INTERFACE\_HDMI/JACK BLOCK DI AGRAM



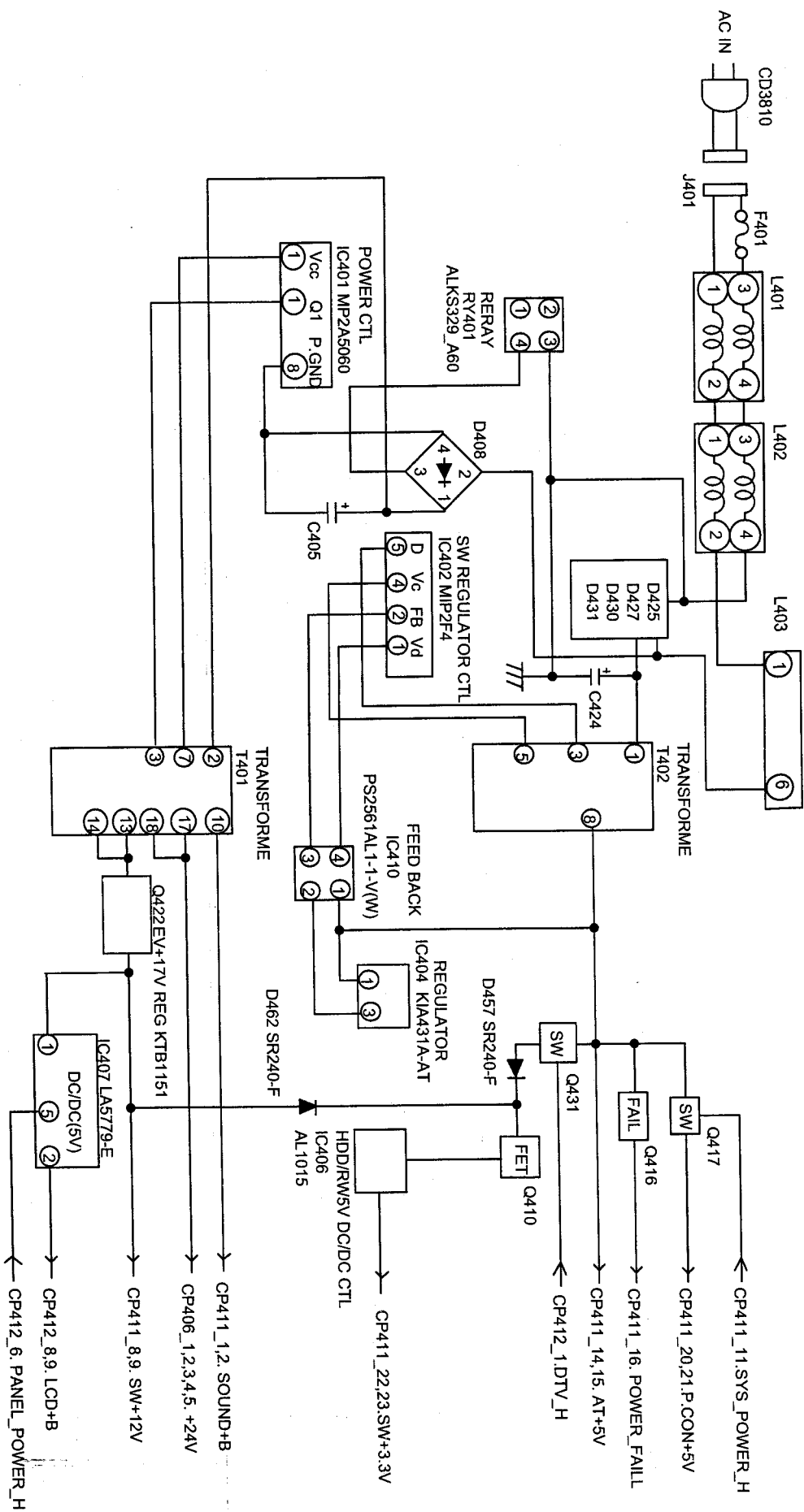
# SOUND AMP/HEADPHONE AMP/AV JACK/SWITCH BLOCK DI AGRAM



# DIGITAL BLOCK DIAGRAM

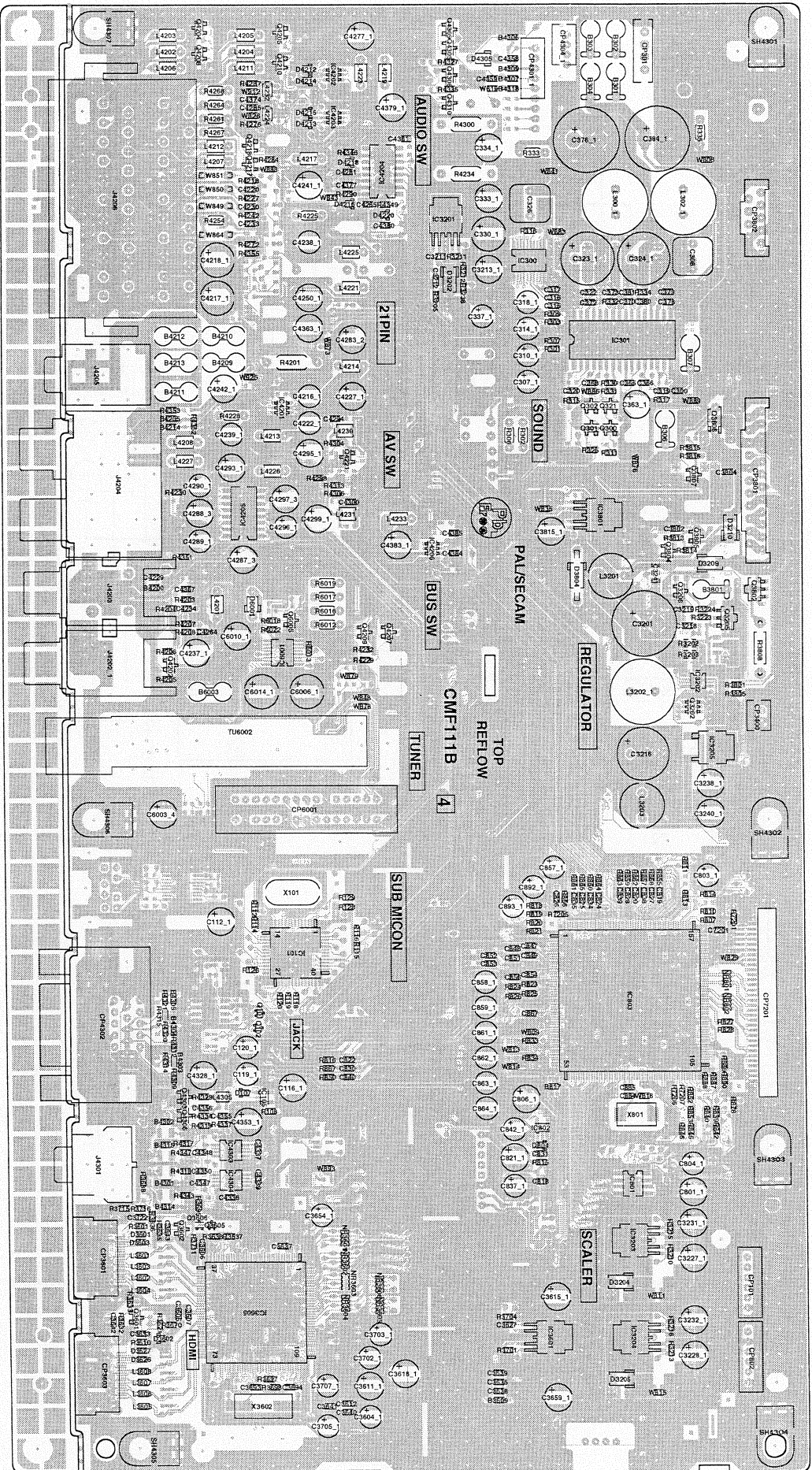


# POWER(POWER PCB) BLOCK DIAGRAM

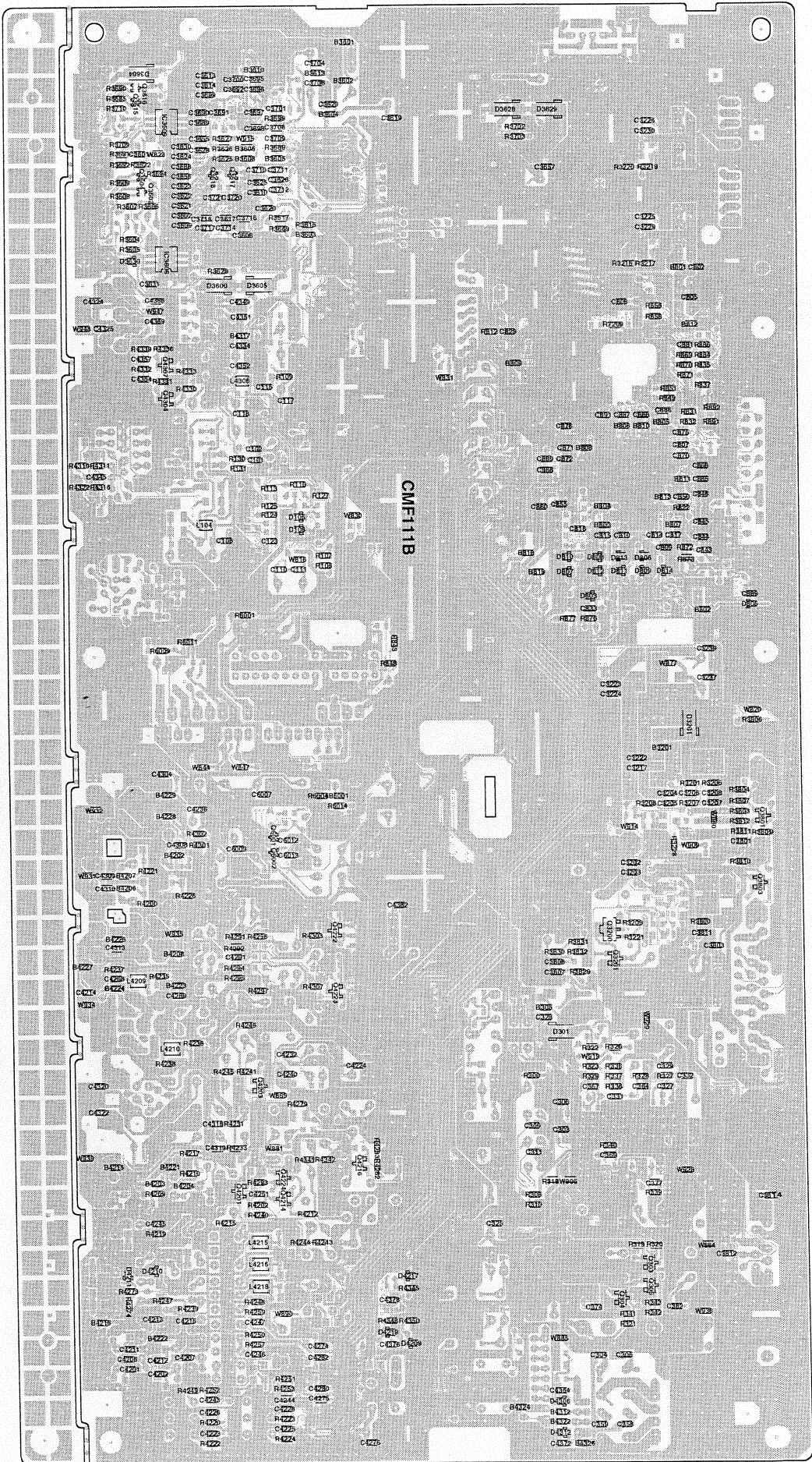




# PRINTED CIRCUIT BOARDS MAIN (TOP SIDE)



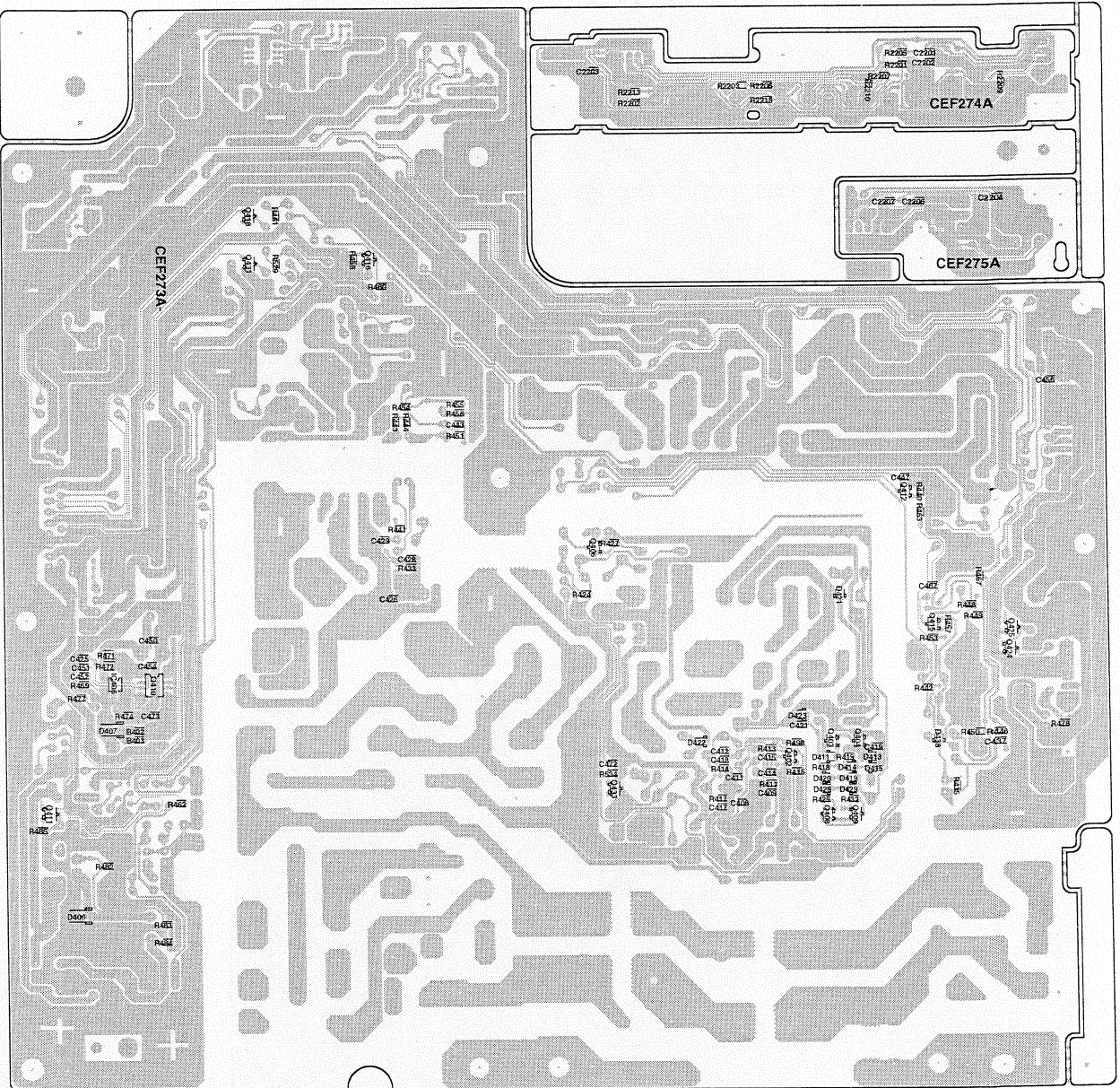
PRINTED CIRCUIT BOARDS  
MAIN (BOTTOM SIDE)







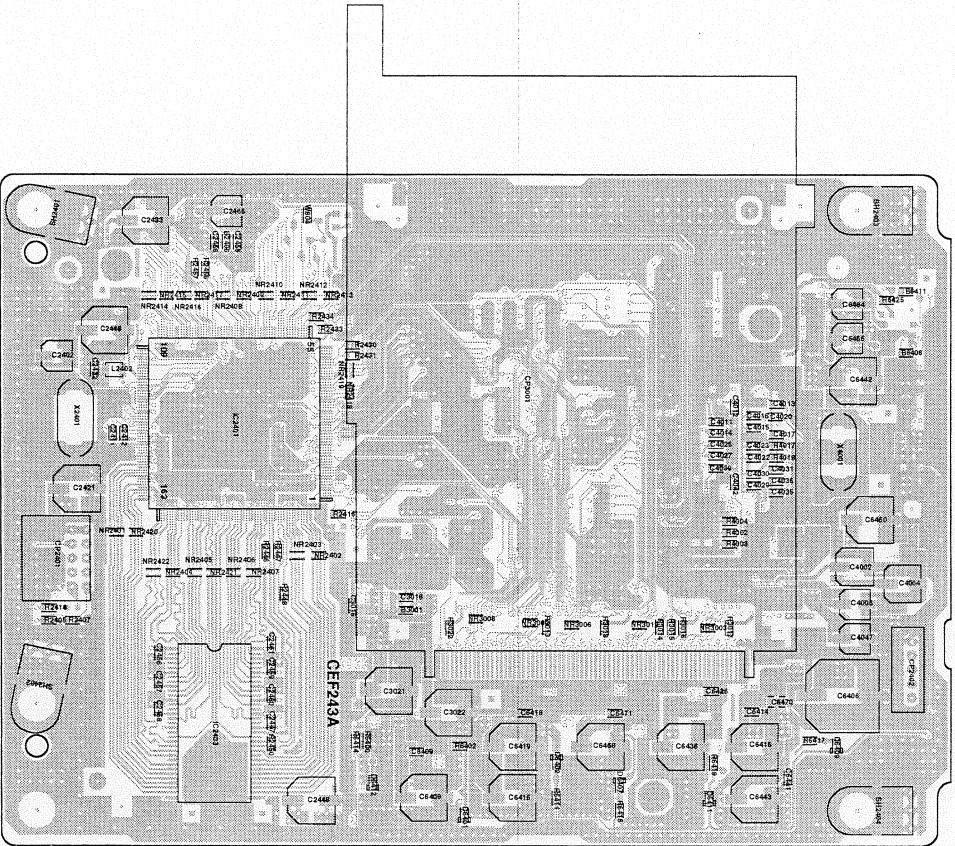
PRINTED CIRCUIT BOARDS  
POWER/OPERATION/REMOCON (CHIP MOUNTED PARTS)  
SOLDER SIDE



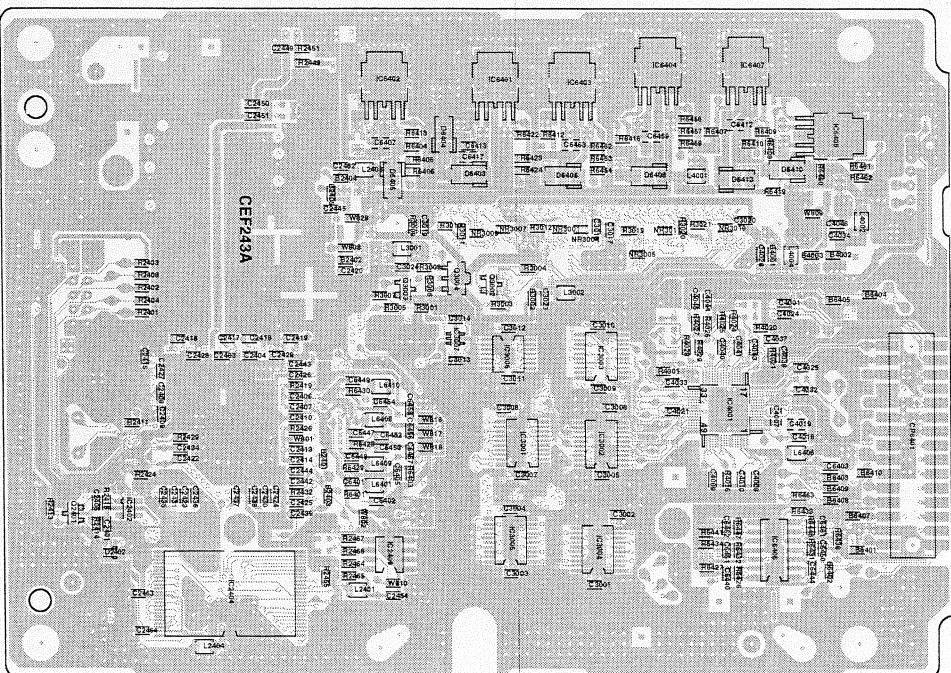


# PRINTED CIRCUIT BOARDS

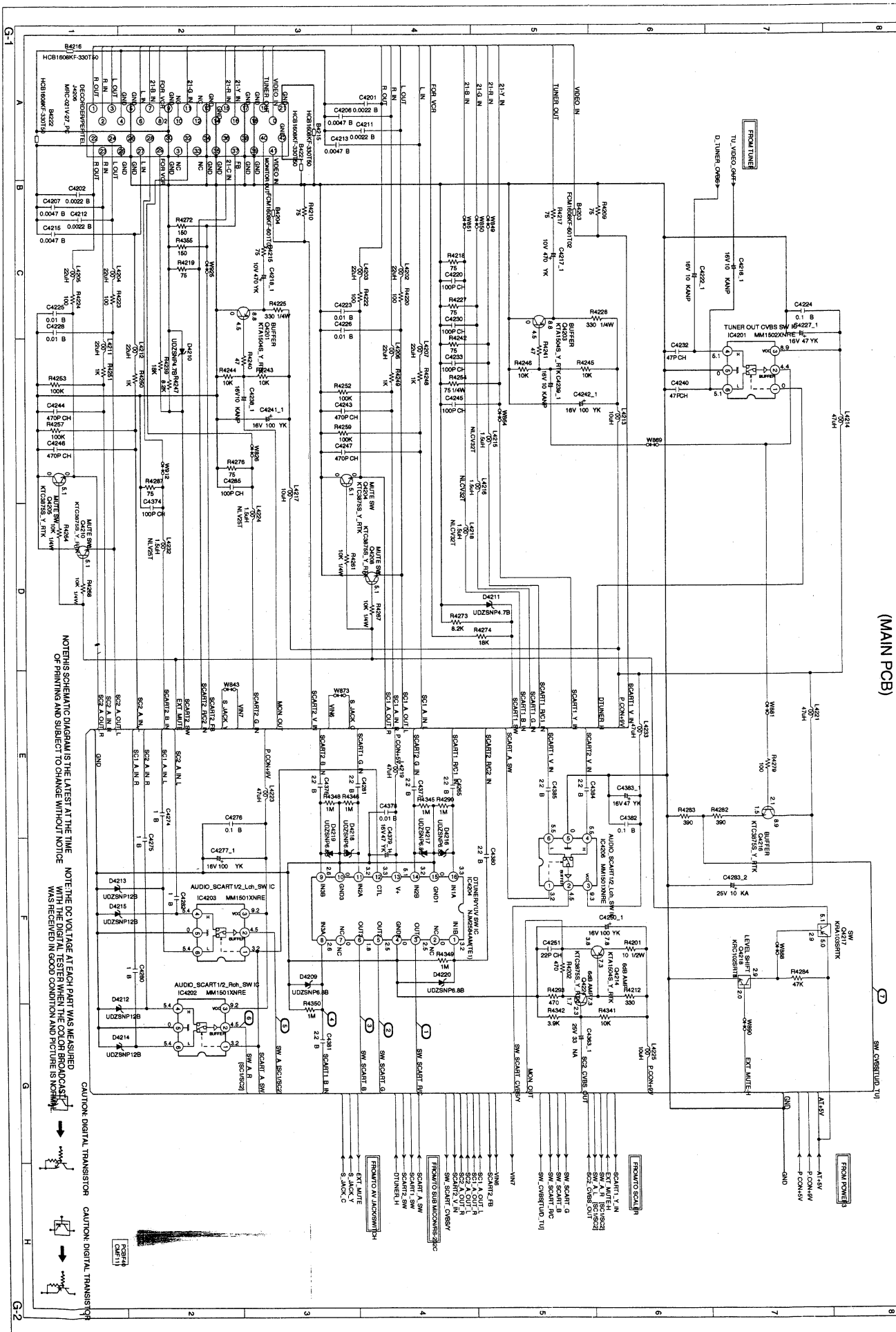
DIGITAL (TOP SIDE)



DIGITAL (BOTTOM SIDE)



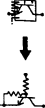
# 21PIN SCHEMATIC DIAGRAM (MAIN PCB)



NOTING SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME  
OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE

NOTE THE DC VOLTAGE AT EACH PART WAS MEASURED  
WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST  
WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL

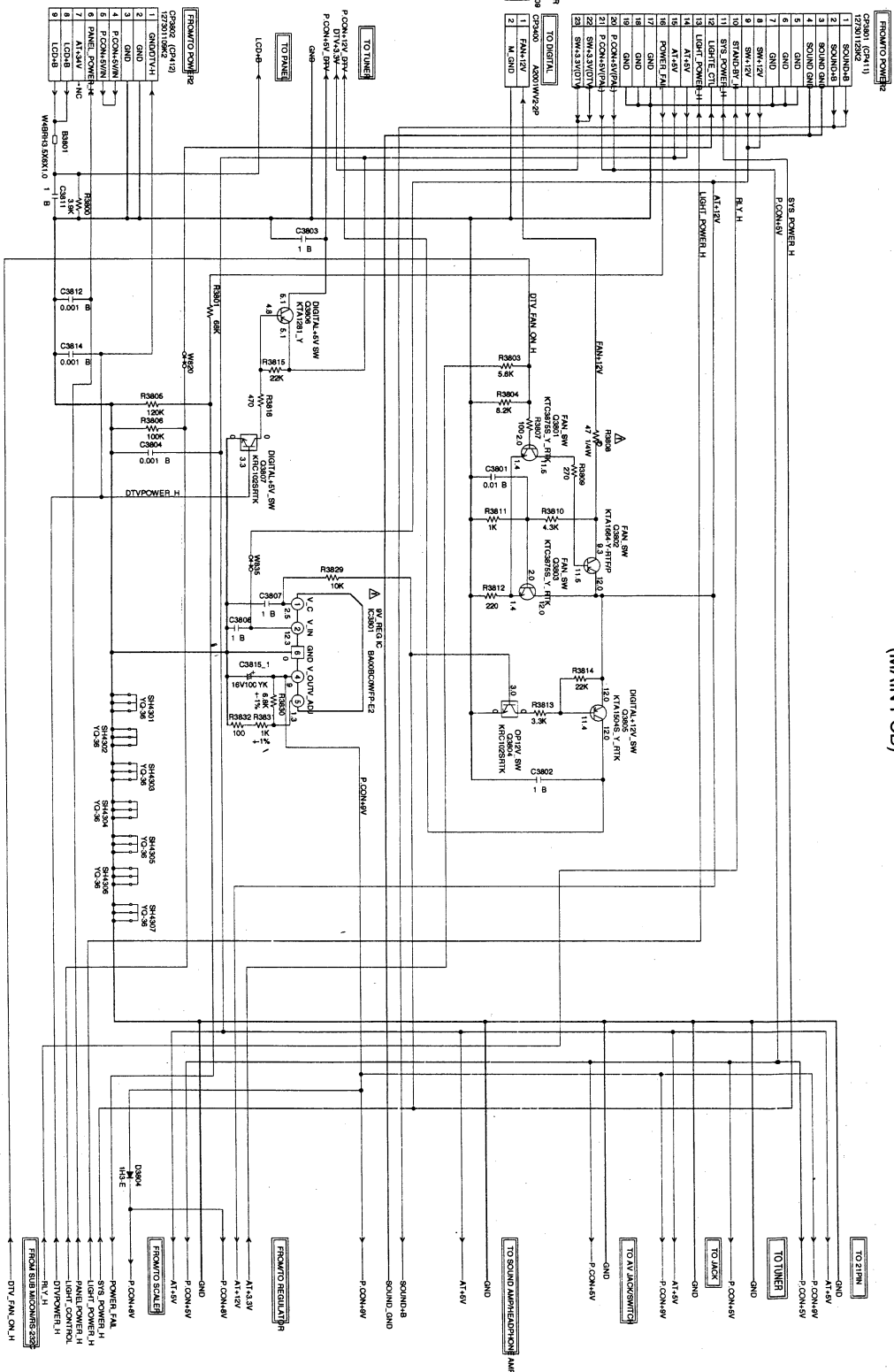
CAUTION: DIGITAL TRANSISTOR CAUTION: DIGITAL TRANSISTOR



PCB#14

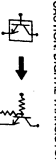
Q4211

## (MAIN PCB)

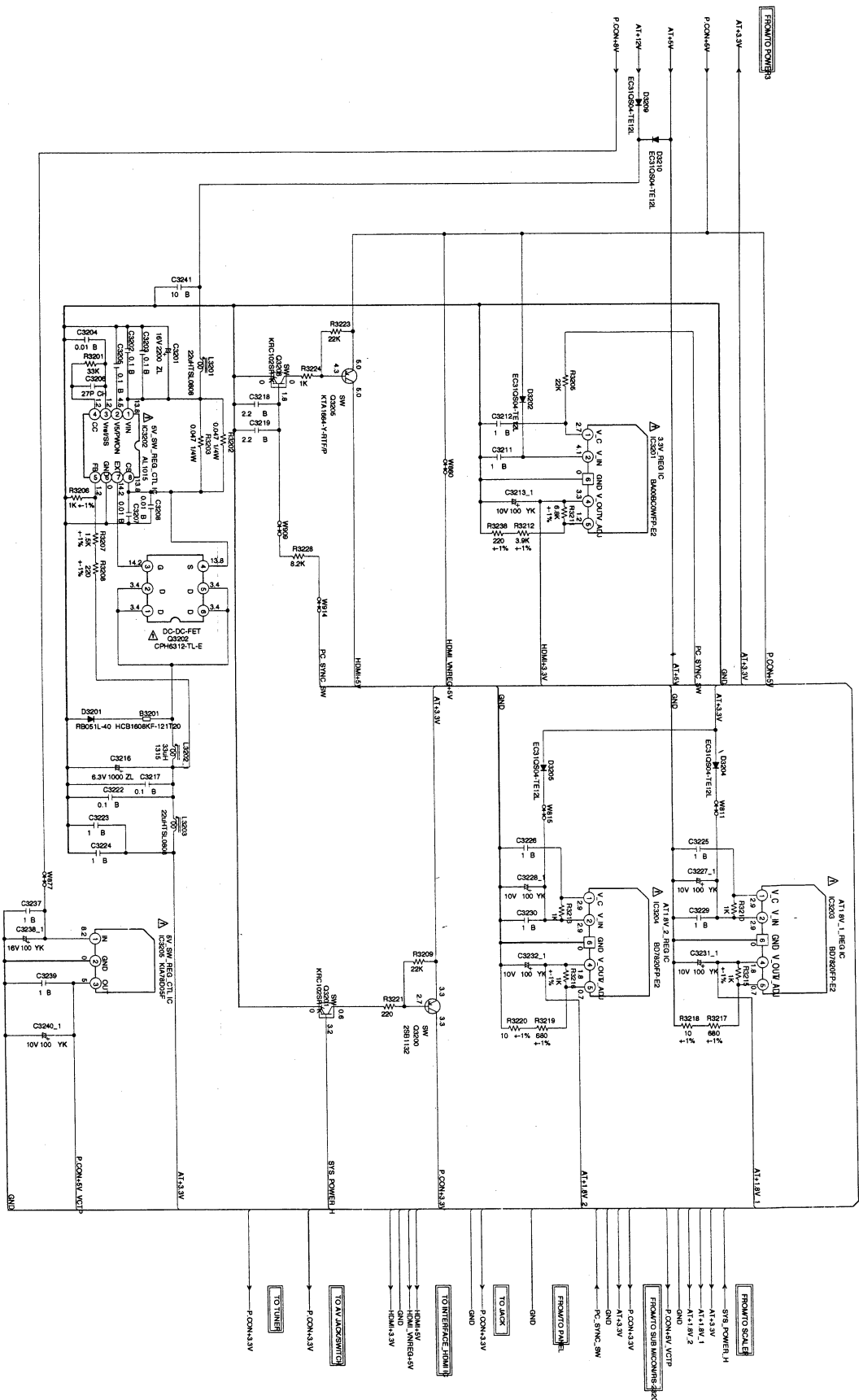


ONLY USE THESE PARTS MARKED **CS** OR **CSM** FOR CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY

**LES PIÈCES RÉPARÉES PAR UN  
DANGEREUSES AN POINT DE VUE SECURITE  
NUTILISER QUE CELLS DECRIRES  
DANS LA NOMENCLATURE DES PIÈCES**



## (MAIN PCB)



NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL

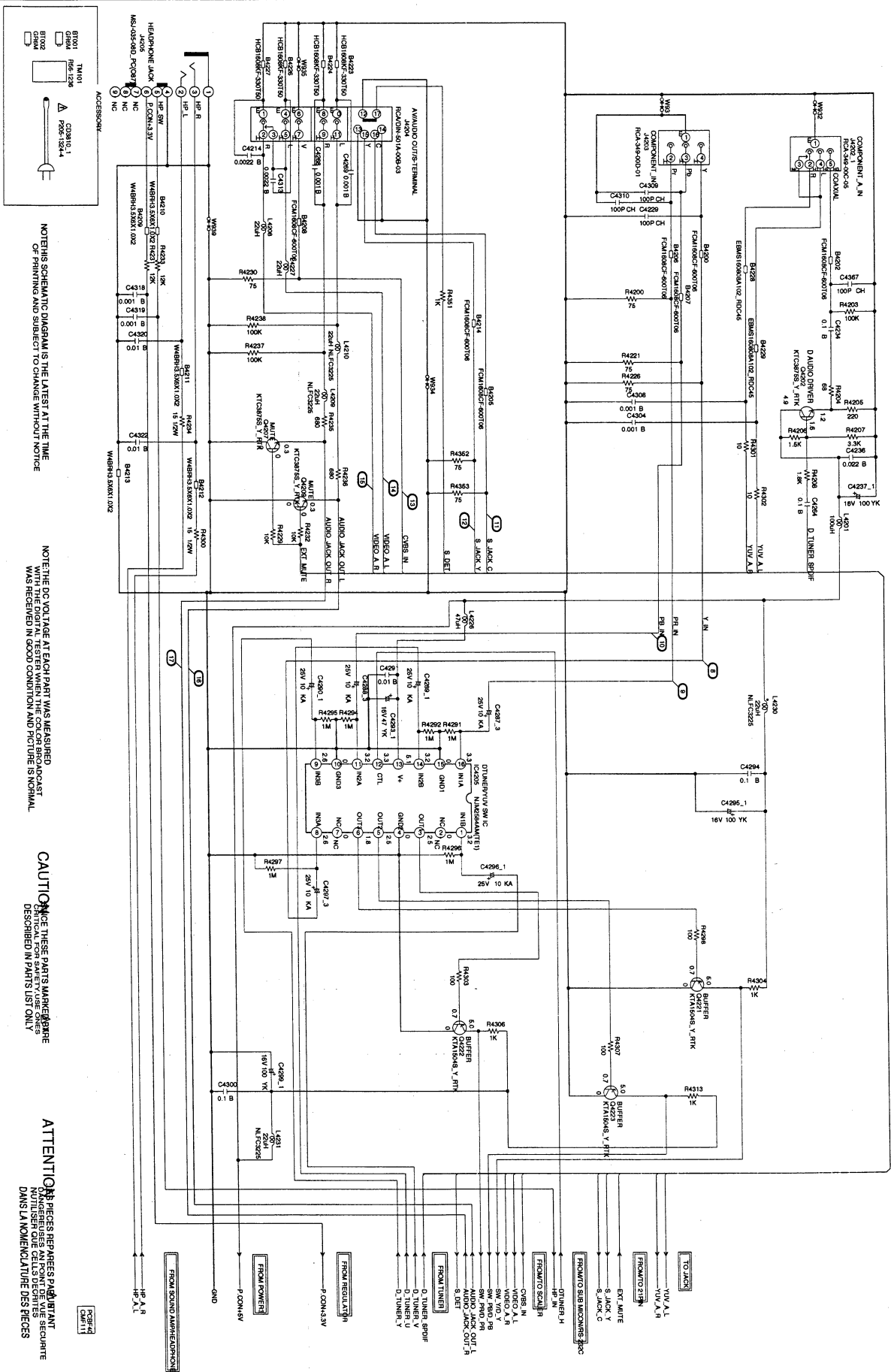
**ATTENTION** LES PIÈCES RÉPARÉES PAR UN  
DANGEREUSES AN POINT DE VUE SECURITE  
NUTILISER QUE CELLS DECRIITES  
DANS LA NOMENCLATURE DES PIÈCES

**CAUTION: DIGITAL TRANSISTOR**

PCBF40  
CMF11



## (MAIN PCB)

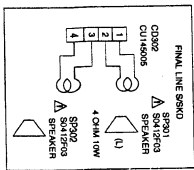


NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL

CRITICAL FOR SAFETY, USE ONE  
DESCRIBED IN PARTS LIST ONLY

### DANS LA NOMENCLATURE DES PIÈCES

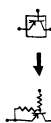
## (MAIN PCB)



NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

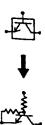
**ATTENTION: LES PIÈCES RÉPARÉES PEUVENT  
ÊTRE DANGEREUSES AU POINT DE VUE SÉCURITÉ  
N'UTILISER QUE CELLES DÉCRITES  
DANS LA NOMENCLATURE DES PIÈCES**

**CAUTION: DIGITAL TRANSISTOR**

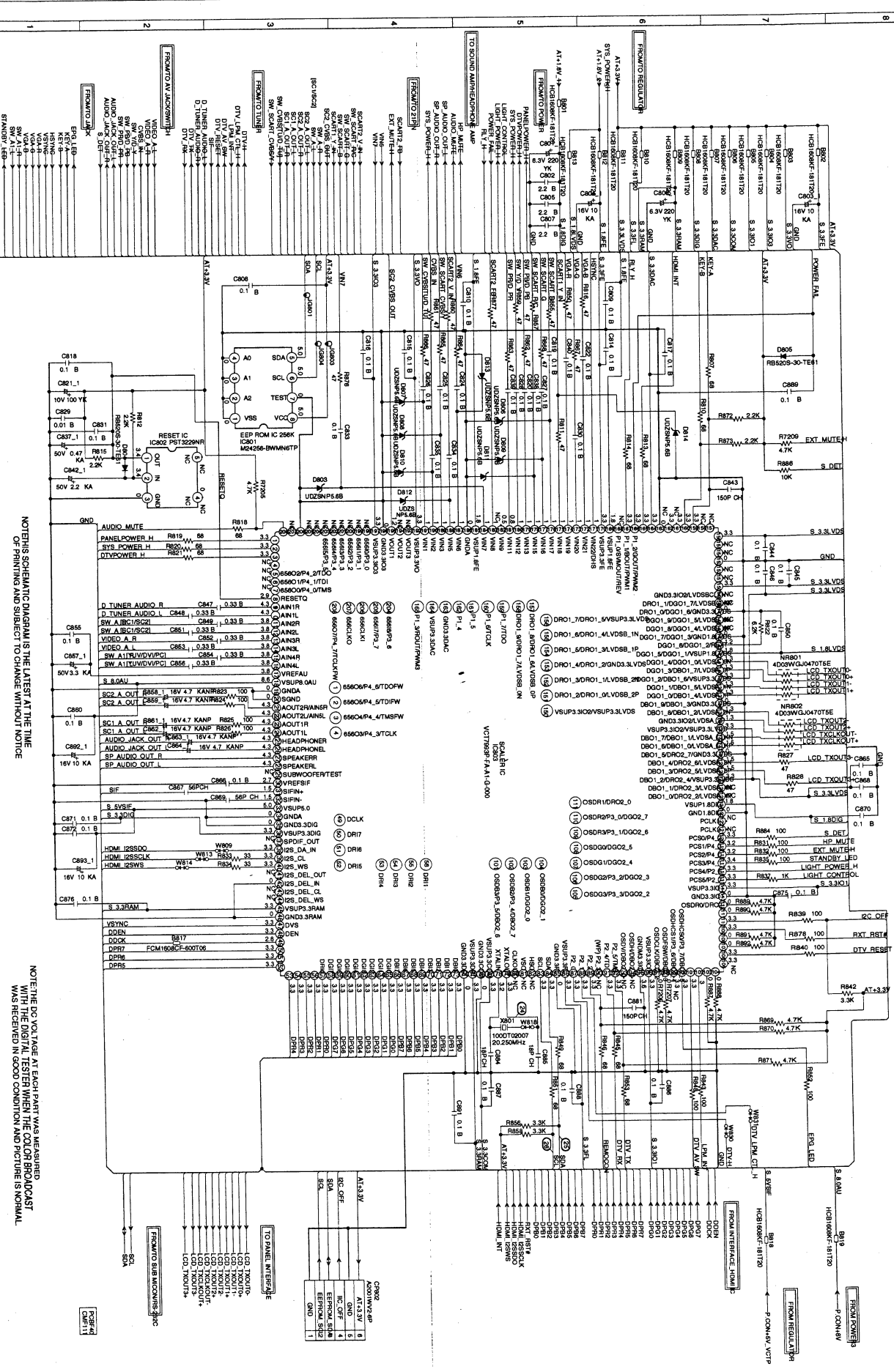


[illegible]

**CAUTION: DIGITAL TRANSISTOR**

PCBF4  
CMF11

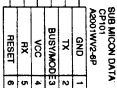
# SCALER SCHEMATIC DIAGRAM (MAIN PCB)



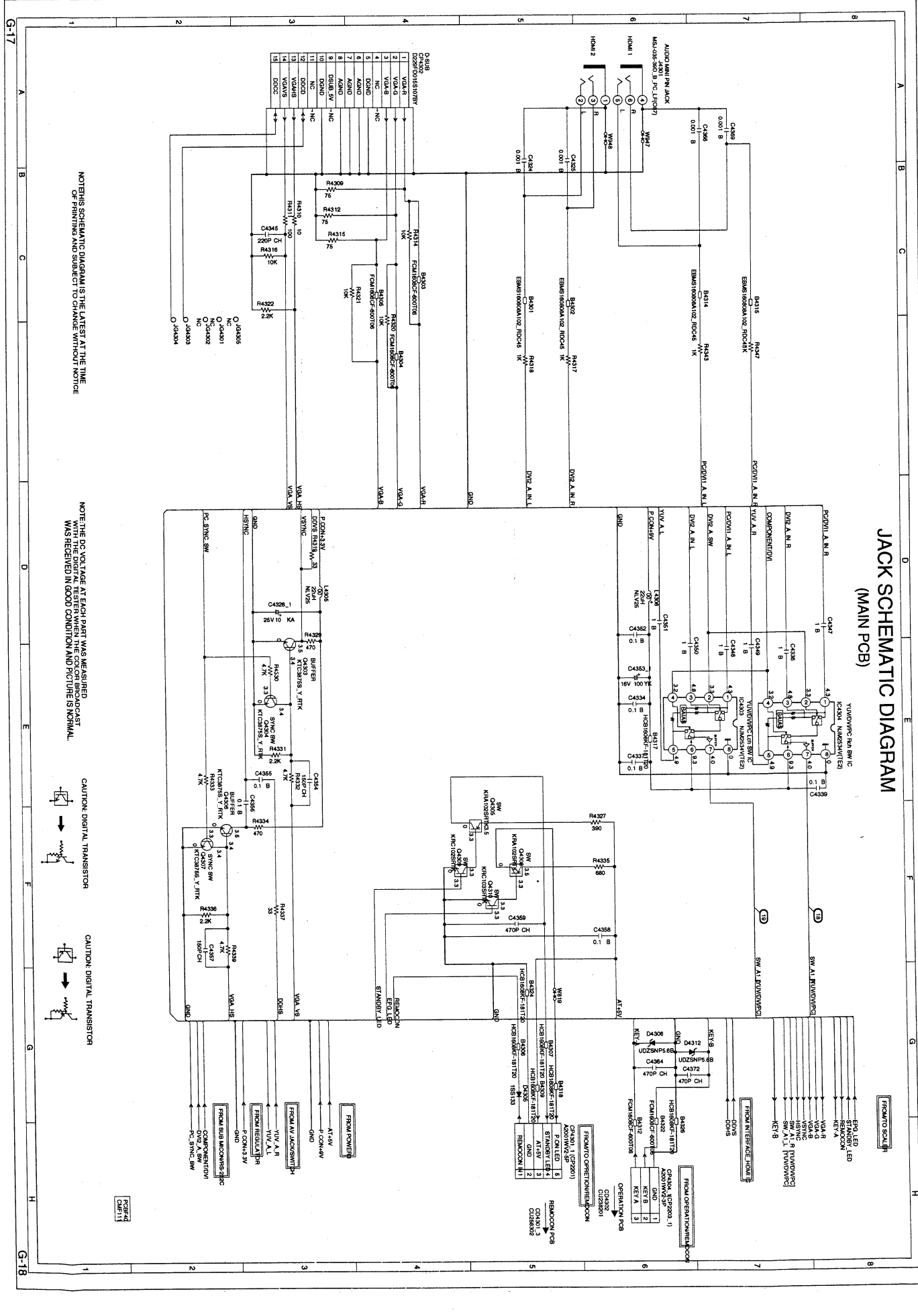
NOTES: SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE CDS BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL

## (MAIN PCB)



NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

[illegible]

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL

**CAUTION: DIGITAL TRANSISTOR**

PUBF-4  
CMF-111

32-PIN DIP

FROM SCALE

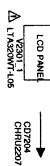
FROM FAN

FROM POWER

FROM REGULATOR

GND

**ATTENTION** LES PIÈCES RÉPARÉES PAR UN  
DANGEREUSES AN POINT DE VUE SECURITE  
NUTILISER QUE CELLS DECRIITES  
DANS LA NOMENCLATURE DES PIÈCES

PCBF-40  
CMF-111



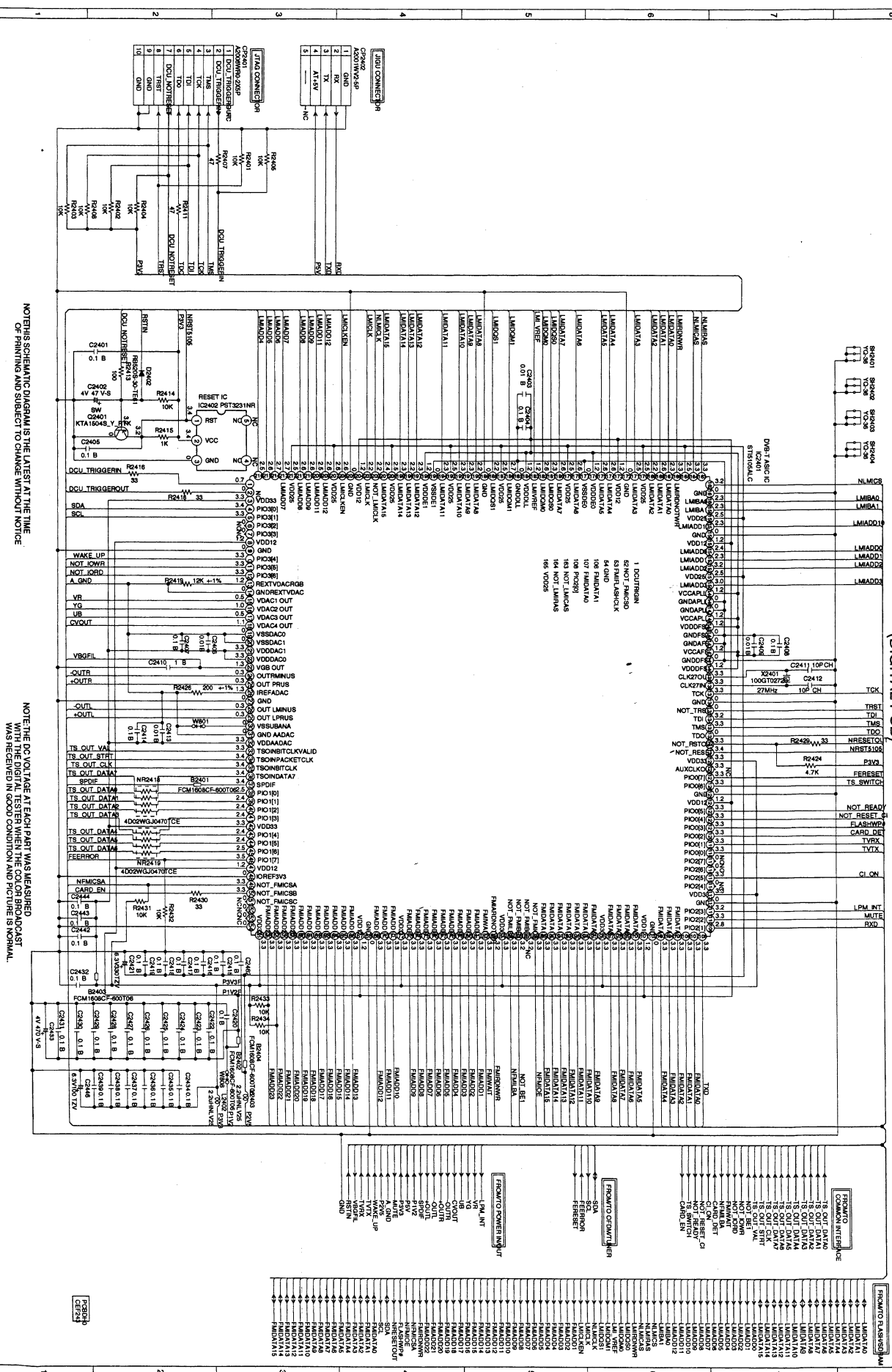
NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL

**DANGEREUSES AN POINT DE VUE SECURITE  
UTILISER QUE CELLS DECRIITES  
DANS LA NOMENCLATURE DES PIECES**

CMF11



## (DIGITAL PCB)



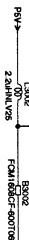
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL

(DIGITAL PCB)



(DIGITAL PCB)



NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL

CI CONNECTOR

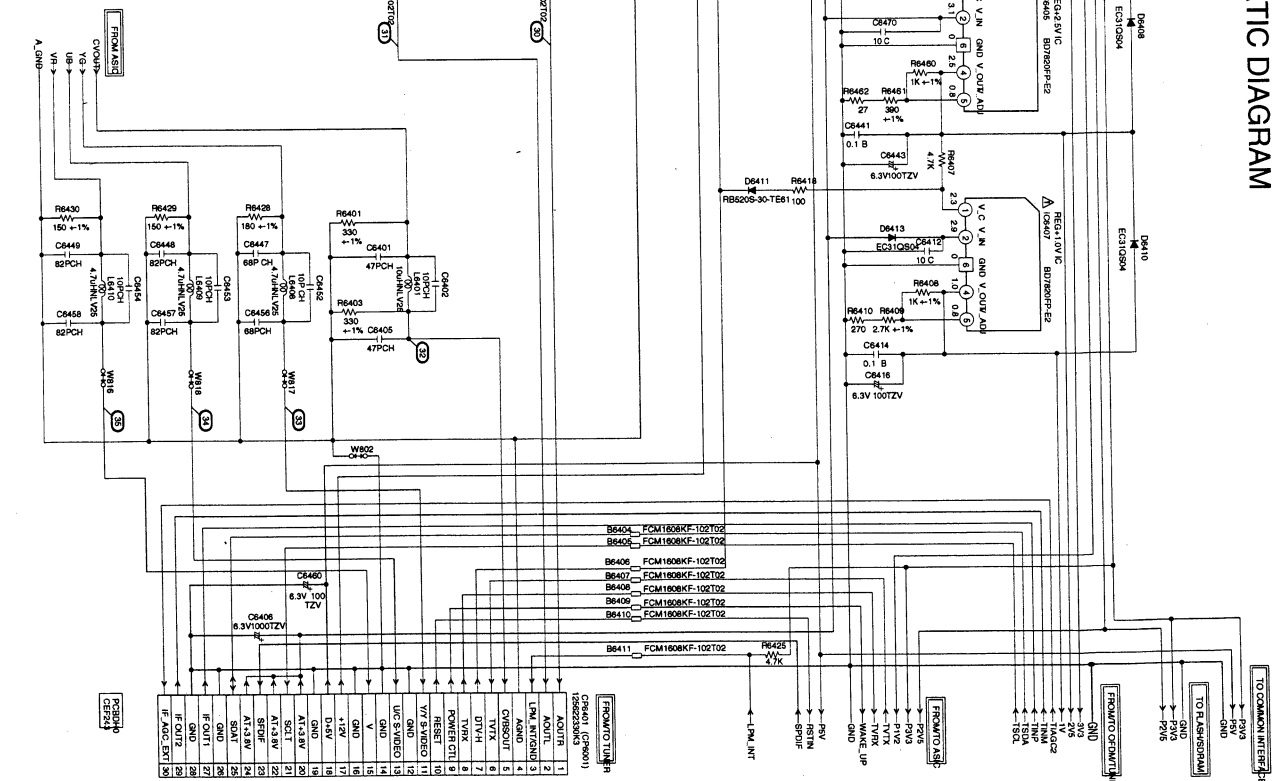
CP3001  
36\_5027\_068\_130\_831  
GND 1

# POWER IN/OUT SCHEMATIC DIAGRAM (DIGITAL PCB)

**CAUTION** THESE PARTS MARKING ARE  
CRITICAL FOR SAFETY USE ONLY  
DESCRIBED IN PARTS LIST ONLY

**ATTENTION** THESE PARTS MARKING ARE  
CRITICAL FOR SAFETY USE ONLY  
DESCRIBED IN PARTS LIST ONLY

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED  
WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST  
WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.



OFDMJUNER SCHEMATIC DIAGRAM  
(DIGITAL PCB)

NOTES: SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH A DIGITAL METER. THE MEASUREMENTS OF DC VOLTAGE WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

FROMTO ASB  
FEEDINP  
FEEDOUT  
SCL  
TS IN VAL  
TS IN START  
TS IN CLK  
TS IN DATA7  
TS IN DATA6  
TS IN DATA5  
TS IN DATA4  
TS IN DATA3  
TS IN DATA2  
TS IN DATA1  
TS IN DATA0

TO COMMON INTERFACE  
TS IN CLK  
TS IN DATA0  
TS IN DATA1  
TS IN DATA2  
TS IN DATA3  
TS IN DATA4  
TS IN DATA5  
TS IN DATA6  
TS IN DATA7  
TS IN VAL

FROMTO POWER INOUT  
TS0A  
TS0B  
TS0C  
TS0D  
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TS0F  
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TS0I  
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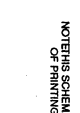
NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL

PCBDH  
CEF243

(POWER PCB)



**ATTENTION** LES PIÈCES RÉPARÉES PAR UN  
DANGEREUSES AU POINT DE VUE SÉCURITÉ  
UTILISER QUE CELLES DÉCRITES  
DANS LA NOMENCLATURE DES PIÈCES

[illegible]

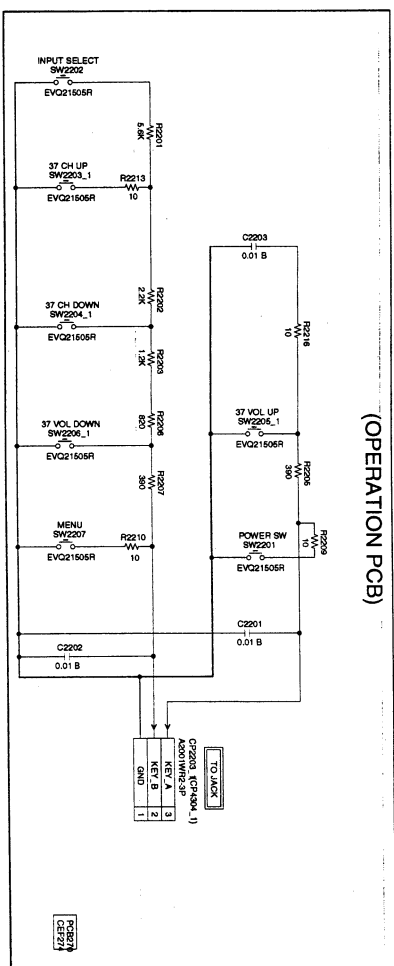
**CAUTION** THESE PARTS MARKED CRITICAL FOR SAFETY USE ONES DESCRIBED IN PARTS LIST ONLY

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

**ATTENTION** LES PIÈCES RÉPARÉES PAR SUivant  
DANGEREUSES AN POINT DE VUE SECURITE  
NUTILISER QUE CELLS DECRITES  
DANS LA NOMENCLATURE DES PIÈCES

**CAUTION: DIGITAL TRANSISTORS**

PCB24  
CEF273

[illegible]

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.



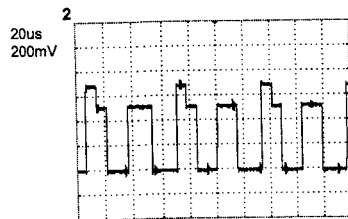
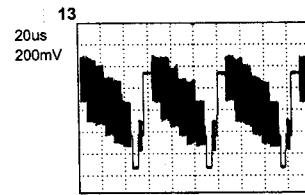
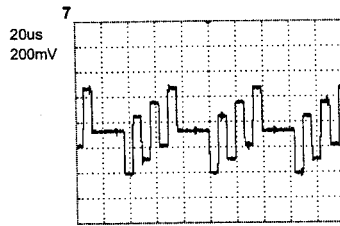
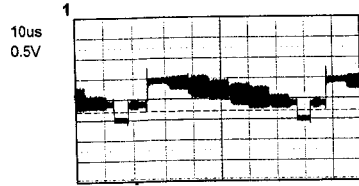
# INTERCONNECTION DIAGRAM

**CAUTION**—DO NOT USE THESE PARTS MARKED **EX** UNLESS THEY ARE SPECIFICALLY IDENTIFIED AS CRITICAL FOR SAFETY. USE ONES DESCRIBED IN PARTS LIST ONLY.

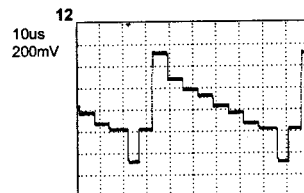
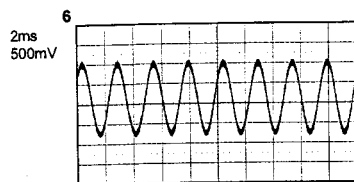
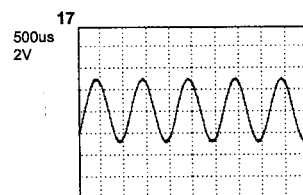
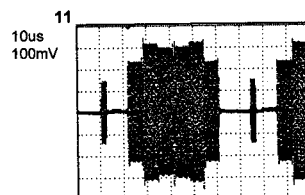
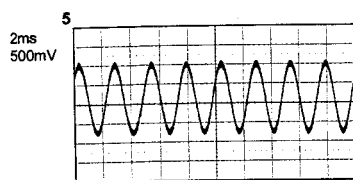
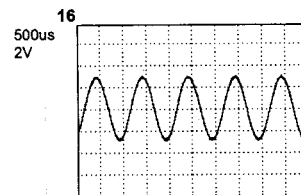
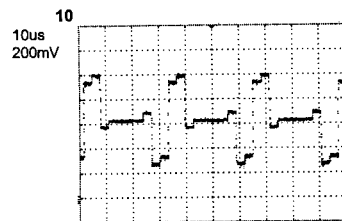
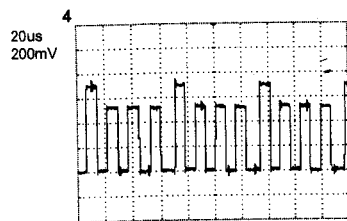
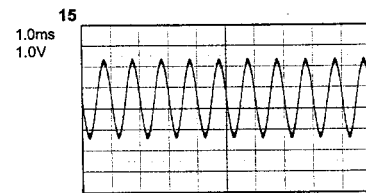
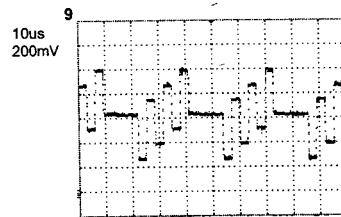
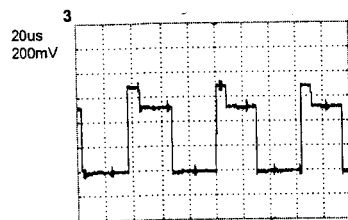
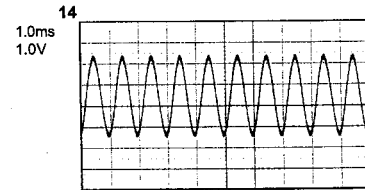
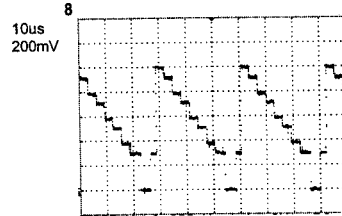
**CAUTION**—DO NOT REPLACE THESE PARTS MARKED **EXPLOSION-PROOF** UNLESS THEY ARE IDENTICAL TO THE ORIGINALS. CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

# WAVEFORMS

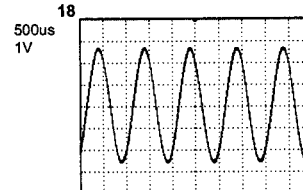
21PIN



AV JACK/SWITCH



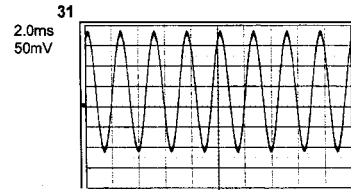
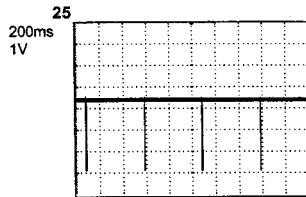
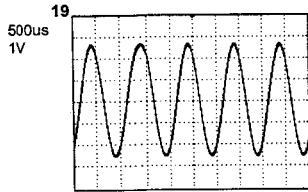
JACK



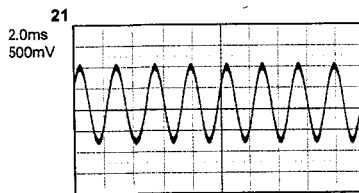
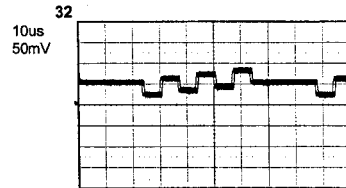
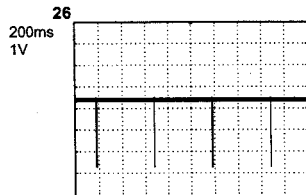
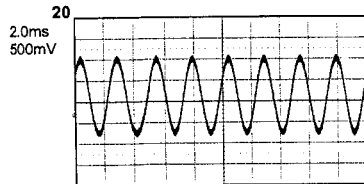
NOTE: The following waveforms were measured at the point of the corresponding balloon number in the schematic diagram.

# WAVEFORMS

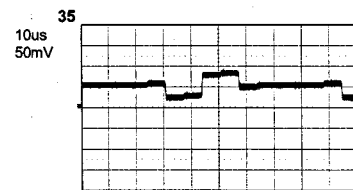
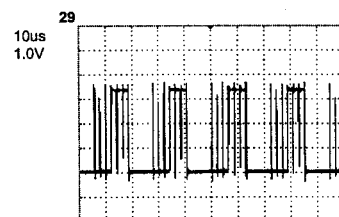
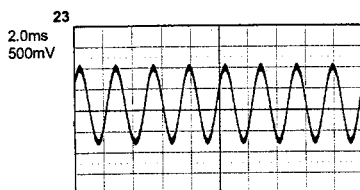
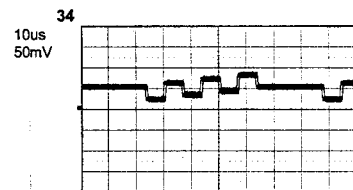
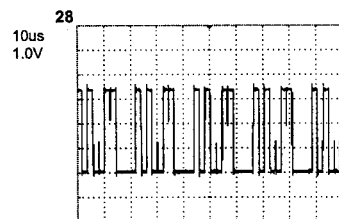
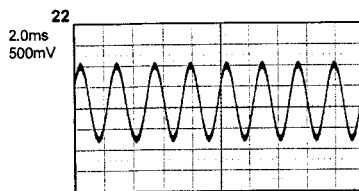
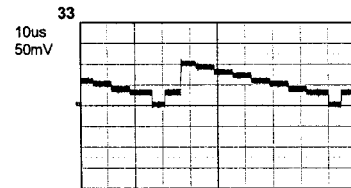
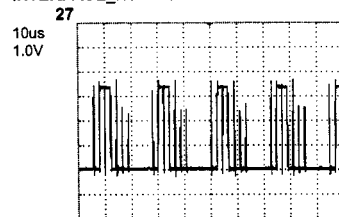
## JACK



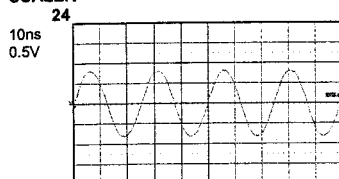
## SOUND AMP/HEADPHONE AMP



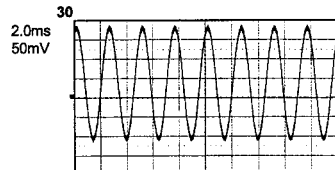
## INTERFACE\_HDMI IC



## SCALER



## POWER I/O



**NOTE:** The following waveforms were measured at the point of the corresponding balloon number in the schematic diagram.

This diagram shows an exploded perspective view of a portable electronic device assembly. The main components are labeled as follows:

- 101**: The main housing or chassis, shown in an exploded view with internal components like **101A**, **101B**, **101C**, **101D**, **101E**, and **101F**.
- 102**: A large internal component, possibly a display or a main circuit board, with sub-components **102A**, **102B**, **102C**, **102D**, **102E**, and **102F**.
- 103**: A component, possibly a camera or a sensor, with sub-components **103A**, **103B**, **103C**, and **103D**.
- 104**: A component, possibly a battery or a power source, with sub-components **104A** and **104B**.
- 105**: A component, possibly a speaker or a microphone, with sub-components **105A**, **105B**, and **105C**.
- 106**: A component, possibly a connector or a port, with sub-components **106A**, **106B**, and **106C**.
- 107**: A component, possibly a button or a switch, with sub-components **107A**, **107B**, and **107C**.
- 108**: A component, possibly a lens or a filter, with sub-components **108A**, **108B**, and **108C**.
- 109**: A component, possibly a cover or a frame, with sub-components **109A**, **109B**, and **109C**.
- 110**: A component, possibly a hinge or a joint, with sub-components **110A**, **110B**, and **110C**.
- 111**: A component, possibly a screw or a fastener, with sub-components **111A**, **111B**, and **111C**.
- 112**: A component, possibly a bracket or a support, with sub-components **112A**, **112B**, and **112C**.
- 113**: A component, possibly a cable or a wire, with sub-components **113A**, **113B**, and **113C**.
- 114**: A component, possibly a connector or a port, with sub-components **114A**, **114B**, and **114C**.
- 115**: A component, possibly a button or a switch, with sub-components **115A**, **115B**, and **115C**.
- 116**: A component, possibly a lens or a filter, with sub-components **116A**, **116B**, and **116C**.
- 117**: A component, possibly a bracket or a support, with sub-components **117A**, **117B**, and **117C**.
- 118**: A component, possibly a cable or a wire, with sub-components **118A**, **118B**, and **118C**.
- 119**: A component, possibly a bracket or a support, with sub-components **119A**, **119B**, and **119C**.
- 120**: A component, possibly a cable or a wire, with sub-components **120A**, **120B**, and **120C**.
- 121**: A component, possibly a bracket or a support, with sub-components **121A**, **121B**, and **121C**.
- 122**: A component, possibly a cable or a wire, with sub-components **122A**, **122B**, and **122C**.
- 123**: A component, possibly a bracket or a support, with sub-components **123A**, **123B**, and **123C**.
- 124**: A component, possibly a cable or a wire, with sub-components **124A**, **124B**, and **124C**.
- 125**: A component, possibly a bracket or a support, with sub-components **125A**, **125B**, and **125C**.

The diagram also includes labels for specific assemblies:

- PCBDH0 (DIGITAL PCB ASSY)**: A digital printed circuit board assembly.
- PCBE40 (MAIN PCB ASSY)**: A main printed circuit board assembly.
- PCBD40 (POWER PCB ASSY)**: A power printed circuit board assembly.
- PCBD70 (OPERATION PCB ASSY)**: An operation printed circuit board assembly.
- PCBDA0 (REMOCON PCB ASSY)**: A remote control printed circuit board assembly.

# MECHANICAL REPLACEMENT PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
101	7A701B003A	FRONT CABI ASS'Y	201	8110630A0U	SCREW TAP TITE(P) BRAZIER 3x10
101A	701WPDA034	CABINET FRONT	202	810763080U	SCREW TAP TITE(S) BRAZIER 3x8
101B	702WNB010	SHEET SPEAKER	203	811063080U	SCREW TAP TITE(P) BRAZIER 3x8
101C	713WPA0407	GLASS LED	204	8109130A0U	SCREW TAP TITE(B) WH7 3x10
101D	7232020799	BADGE BRAND	205	8110K3080U	SCREW TAP TITE(P) LAMI HEAD 3x8
101E	800WQ0A092	FELT SHEET 9x390xT=0.5	206	810A14080U	SCREW WASHER(A) M4x8
101F	800WQ00102	FELT SHEET 9x730xT=0.5	207	810213080U	SCREW PAN M3x8
102	7A7020249A	BACK CABI ASS'Y	208	810923060U	SCREW TAP TITE(B) BIND 3x6
102A	702WPAB081	CABINET BACK	209	810923080U	SCREW TAP TITE(B) BIND 3x8
102B	722202B030	SHEET RATING	210	8171130A0U	SCREW TAP TITE(B) WASHER12 3x10
102C	800WQ0A049	FELT SHEET 9x220xT=0.3	211	8110230B0U	SCREW TAP TITE(P) BIND 3x20
102D	800WQ0A106	FELT SHEET 9x400xT=0.3	212	8117540A0U	SCREW TAPPING(B0) TRUSS 4x10
102E	800WQ0A140	FELT SHEET 700x10 T=0.3	213	8167160E5U	SCREW WASHER(B) 6x55
102F	800WQ00106	FELT SHEET 150x9xT=1.0	214	8102220A0U	SCREW BIND M2x10
102G	706WPA0025	COVER CONNECTOR	215	811022680U	SCREW TAP TITE(P) BIND 2.6x8
102H	706WPAA007	COVER CONNECTOR	---	723000D692	SHEET CARTON
103	7A704A060A	STAND ASS'Y	---	791WHAA046	LAMIFILM BAG
103A	704WPBA050	STAND	---	792UHAA077	PACKAGE TOP
103B	761WSA0581	ANGLE STAND	---	792UHAA078	PACKAGE BOTTOM
103C	800WFA0121	CUSHION LEG	---	793PCDA027	GIFT BOX
104	7A735A005A	PLATE BUTTON ASS'Y	---	J32M0301A	INSTRUCTION BOOK(G)
104A	711WPDA744	PLATE BUTTON	---	J32M0307A	QUICK SET-UP SHEET
104B	735WPA0947	BUTTON FRAME-TV	---	J32M0310A	INSTRUCTION BOOK(F)
105	7A7050006A	HOLDER PCB ASS'Y	---	J32M0311A	INSTRUCTION BOOK(H)
105A	761WPA0475	HOLDER PCB	---	J32M0314A	INSTRUCTION BOOK(CZ)
105B	761WSA0556	ANGLE PCB-4	---	J32M0325A	INSTRUCTION BOOK(S)
106	761WSA0432	SHIELD 21PIN	---	J32M0346A	INSTRUCTION BOOK(E)
107	724000A014	SHEET FUSE	---	J32M0352A	INSTRUCTION BOOK(I)
108	761WSA0459	SHIELD IC	---	JB5PD800	POLYBAG,INSTRUCTION
109	752WSA0653	SHIELD SCALER			
110	761WSAA086	ANGLE LCD TOP			
111	761WSAA088	ANGLE PCB-1			
112	761WSAA089	PLATE JACK			
113	761WSA0466	ANGLE HINGE			
114	761WSA0472	ANGLE MAIN			
115	761WSA0498	ANGLE LCD BOTTOM			
116	761WSA0538	ANGLE PCB-3			
117	761WSA0603	ANGLE PCB-2			
118	8965TS1210	CUSHION W10/H12/L10			
119	8965TS1010	CUSHION 65TS10-10(10x10x25)			
120	899RFC21V0	HOLDER CORD			
121	899RLWC2SV	HOLDER WIRE			
122	7250000607	SHEET PE			
123	761WPAA160	HOLDER PANEL			
124	752WSA0677	SHIELD DIGITAL			
125	8965TS2010	CUSHION W8/H20/L10			

# ELECTRICAL REPLACEMENT PARTS LIST

REF. NO.	PART NO.	DESCRIPTION		REF. NO.	PART NO.	DESCRIPTION	
RESISTORS				DIODES			
△R403	R3X28BR22J	R,METAL OXIDE	0.22 OHM 3W	D446	D1VT001330	DIODE,SILICON	1SS133T-77
△R404	RC31X1155J	RC	1.5M OHM 1W	D447	D1VT001330	DIODE,SILICON	1SS133T-77
△R406	R3K681S22J	R,METAL OXIDE	0.022 OHM 1W	D449	D1VT001330	DIODE,SILICON	1SS133T-77
△R412	R63881R22J	R,FUSE	0.22 OHM 1W	D450	D97U03R31B	DIODE,ZENER	MTZJ3.3B T-77
△R416	R655842R2J	R,FUSE	2.2 OHM 1/4W	D456	D1VT001330	DIODE,SILICON	1SS133T-77
△R466	R5X2AD151J	R,CEMENT	150 OHM 5W	D457	D2LXSR2400	DIODE SCHOTTKY	SR240-F
△R473	R3K78A681J	R,METAL OXIDE	680 OHM 2W	D459	D97U02201B	DIODE ZENER	MTZJ22B T-77
△R475	R3K78A681J	R,METAL OXIDE	680 OHM 2W	D460	D4AT01H3E0	DIODE RECTIFIER	1H3-E
△R494	R3K78A681J	R,METAL OXIDE	680 OHM 2W	D461	D97U01101B	DIODE,ZENER	MTZJ11B T-77
△R497	R65581010J	R,FUSE	1 OHM 1W	D462	D2LXSR2400	DIODE SCHOTTKY	SR240-F
△R533	R3K78B473J	R,METAL OXIDE	47K OHM 3W	D803	DE7RB5R62B	DIODE ZENER	UDZSNP5.6B TE-17
△R3808	R65584470J	R,FUSE	47 OHM 1/4W	D804	DD7R20S300	DIODE SCHOTTKY	RB520S-30-TE61
CAPACITORS				D805	DD7R20S300	DIODE SCHOTTKY	RB520S-30-TE61
C376	E7EYF3102M	CE	1000 UF 25V	D806	DE7RB5R62B	DIODE ZENER	UDZSNP5.6B TE-17
C384	E7EYF3102M	CE	1000 UF 25V	D807	DE7RB5R62B	DIODE ZENER	UDZSNP5.6B TE-17
△C402	P2122B334M	CMP	0.33 UF 275V ECQUL	D808	DE7RB5R62B	DIODE ZENER	UDZSNP5.6B TE-17
△C405	E71LHH331D	CE	330 UF 400V	D809	DE7RB5R62B	DIODE ZENER	UDZSNP5.6B TE-17
△C406	CD39E0M13M	CC	0.001 UF 250V	D810	DE7RB5R62B	DIODE ZENER	UDZSNP5.6B TE-17
C422	E7EY78101D	CE	100 UF 100V	D811	DE7RB5R62B	DIODE ZENER	UDZSNP5.6B TE-17
△C423	P4NAE6823H	CMPP	0.082 UF 800V	D812	DE7RB5R62B	DIODE ZENER	UDZSNP5.6B TE-17
△C424	E8E6FH220M	CE	22 UF 400V	D813	DE7RB5R62B	DIODE ZENER	UDZSNP5.6B TE-17
△C427	CD39B0MQ2K	CC	470 PF 250V	D814	DE7RB5R62B	DIODE ZENER	UDZSNP5.6B TE-17
△C433	E7EYF4471M	CE	470 UF 35V	D2201	0021E9Q010	LED	LTL-1BEFJ-002A
△C434	E7EYF4122M	CE	1200 UF 35V	D2402	DD7R20S300	DIODE SCHOTTKY	RB520S-30-TE61
△C435	E7EYF3102M	CE	1000 UF 25V	D3201	DD7RB051L0	DIODE SCHOTTKY	RB051L-40-TE25
△C436	CD39E0M13M	CC	0.001 UF 250V	D3202	D28R1QS040	DIODE	EC31QS04-TE12L
△C438	E7EYF4122M	CE	1200 UF 35V	D3204	D28R1QS040	DIODE	EC31QS04-TE12L
△C440	E7EYF0222M	CE	2200 UF 6.3V	D3205	D28R1QS040	DIODE	EC31QS04-TE12L
△C441	E7ESU5100M	CE	10 UF 50V	D3209	D28R1QS040	DIODE	EC31QS04-TE12L
△C444	E7ESU0221M	CE	220 UF 6.3V	D3210	D28R1QS040	DIODE	EC31QS04-TE12L
△C448	P2122B104M	CMP	0.1 UF 275V ECQUL	D3600	DD7R60L400	DIODE SCHOTTKY	RB160L-40-TE25
C449	E7EYF2102M	CE	1000 UF 16V	D3601	D77R1A1R10	DIODE VARISTA	AVRL161A1R1NT
△C453	E7EYF2102M	CE	1000 UF 16V	D3602	DE7RB5R62B	DIODE ZENER	UDZSNP5.6B TE-17
△C463	CD39B0MQ2K	CC	470 PF 250V	D3603	D77R1A1R10	DIODE VARISTA	AVRL161A1R1NT
C466	E7EYF4471M	CE	470 UF 35V	D3604	DD7R60L400	DIODE SCHOTTKY	RB160L-40-TE25
△C475	P4NAE6823H	CMPP	0.082 UF 800V	D3605	DD7R60L400	DIODE SCHOTTKY	RB160L-40-TE25
C3201	E7EYF2222M	CE	2200 UF 16V	D3626	D77R1A1R10	DIODE VARISTA	AVRL161A1R1NT
DIODES				D3627	D77R1A1R10	DIODE VARISTA	AVRL161A1R1NT
D105	DE7RB5R62B	DIODE ZENER	UDZSNP5.6B TE-17	D3628	D28R1QS040	DIODE	EC31QS04-TE12L
D107	DD7R20S300	DIODE SCHOTTKY	RB520S-30-TE61	D3629	D28R1QS040	DIODE	EC31QS04-TE12L
D108	DE7RB5R62B	DIODE ZENER	UDZSNP5.6B TE-17	D3630	DE7RB5R62B	DIODE ZENER	UDZSNP5.6B TE-17
D301	D28R11FS20	DIODE	EC11FS2-TE12L	D3804	D4AT01H3E0	DIODE RECTIFIER	1H3-E
D401	D4AT01H3E0	DIODE RECTIFIER	1H3-E	D4209	DE7RB6R82B	DIODE ZENER	UDZSNP6.8B TE-17
△D404	D6C047110A	DIODE VARISTA	ENE471D-10A	D4210	DE7RB4R72B	DIODE ZENER	UDZSNP4.7B TE-17
D406	D28R1QS040	DIODE	EC31QS04-TE12L	D4211	DE7RB4R72B	DIODE ZENER	UDZSNP4.7B TE-17
D407	D28R1QS040	DIODE	EC31QS04-TE12L	D4212	DE7RB1202B	DIODE ZENER	UDZSNP12B TE-17
△D408	D2Z05SB800	DIODE,BRIDGE	D5SB80	D4213	DE7RB1202B	DIODE ZENER	UDZSNP12B TE-17
D411	DGERMA1110	DIODE SILICON	MA1111-(TX)	D4214	DE7RB1202B	DIODE ZENER	UDZSNP12B TE-17
D412	D97U03R91B	DIODE,ZENER	MTZJ3.9B T-77	D4215	DE7RB1202B	DIODE ZENER	UDZSNP12B TE-17
D413	DGERMA1110	DIODE SILICON	MA1111-(TX)	D4216	DE7RB6R82B	DIODE ZENER	UDZSNP6.8B TE-17
D414	DGERMA1110	DIODE SILICON	MA1111-(TX)	D4217	DE7RB6R82B	DIODE ZENER	UDZSNP6.8B TE-17
D415	DE7RB3R92B	DIODE ZENER	UDZSNP3.9B TE-17	D4218	DE7RB6R82B	DIODE ZENER	UDZSNP6.8B TE-17
D416	D97U02001B	DIODE,ZENER	MTZJ20B T-77	D4219	DE7RB6R82B	DIODE ZENER	UDZSNP6.8B TE-17
D419	DGERMA1110	DIODE SILICON	MA1111-(TX)	D4220	DE7RB6R82B	DIODE ZENER	UDZSNP6.8B TE-17
D420	DGERMA1110	DIODE SILICON	MA1111-(TX)	D4305	D1VT001330	DIODE,SILICON	1SS133T-77
D421	DGERMA1110	DIODE SILICON	MA1111-(TX)	D4306	DE7RB5R62B	DIODE ZENER	UDZSNP5.6B TE-17
D422	DD7R60M900	DIODE SCHOTTKY	RB160M-90TR	D4312	DE7RB5R62B	DIODE ZENER	UDZSNP5.6B TE-17
D423	DGERMA1110	DIODE SILICON	MA1111-(TX)	D6001	D1VT001330	DIODE,SILICON	1SS133T-77
D424	D4AT01H3E0	DIODE RECTIFIER	1H3-E	D6401	DD7R20S300	DIODE SCHOTTKY	RB520S-30-TE61
△D425	D2WTRM11C0	DIODE SILICON	RM11C-EIC	D6402	DD7R20S300	DIODE SCHOTTKY	RB520S-30-TE61
D426	D1VT001330	DIODE,SILICON	1SS133T-77	D6403	D28R1QS040	DIODE	EC31QS04-TE12L
△D427	D2WTRM11C0	DIODE SILICON	RM11C-EIC	D6404	D28R1QS040	DIODE	EC31QS04-TE12L
D428	DGERMA1110	DIODE SILICON	MA1111-(TX)	D6405	D28R1QS040	DIODE	EC31QS04-TE12L
D429	DGERMA1110	DIODE SILICON	MA1111-(TX)	D6406	D28R1QS040	DIODE	EC31QS04-TE12L
△D430	D2WTRM11C0	DIODE SILICON	RM11C-EIC	D6407	DD7R20S300	DIODE SCHOTTKY	RB520S-30-TE61
△D431	D2WTRM11C0	DIODE SILICON	RM11C-EIC	D6408	D28R1QS040	DIODE	EC31QS04-TE12L
D432	D2BE0RU3B0	DIODE SILICON	RU3B LF-A5	D6409	DD7R20S300	DIODE SCHOTTKY	RB520S-30-TE61
D433	D4AT01H3E0	DIODE RECTIFIER	1H3-E	D6410	D28R1QS040	DIODE	EC31QS04-TE12L
△D435	D2CFC91020	DIODE SILICON	ERC91-02J11SC	D6411	DD7R20S300	DIODE SCHOTTKY	RB520S-30-TE61
△D436	D28A10A100	DIODE SCHOTTKY	FCH10A10	D6412	DD7R20S300	DIODE SCHOTTKY	RB520S-30-TE61
△D437	D28A10A100	DIODE SCHOTTKY	FCH10A10	D6413	D28R1QS040	DIODE	EC31QS04-TE12L
D438	DGERMA1110	DIODE SILICON	MA1111-(TX)	ICS			
D439	D97U03001B	DIODE,ZENER	MTZJ30B T-77	IC101	S30F01IM04	MEMORY DATA	R5F21244SNFP
△D440	D28A10A100	DIODE SCHOTTKY	FCH10A10	IC105	I9UF032290	IC	PST3229NR
△D442	D4AT01H3E0	DIODE RECTIFIER	1H3-E	IC300	IQJP21510	IC	NJM2151AV(Te1)
△D443	D28A10A200	DIODE SILICON	FCF10A20	△IC301	IQJP89320	IC	TDA8932T
D445	D97U02401B	DIODE,ZENER	MTZJ24B T-77	△IC401	I2GT050600	IC	MP2A5060

# ELECTRICAL REPLACEMENT PARTS LIST

REF. NO.	PART NO.	DESCRIPTION		REF. NO.	PART NO.	DESCRIPTION	
ICS				TRANSISTORS			
△IC402	I5SD0P2F40	IC	MIP2F4	Q421	TAAT01281Y	TRANSISTOR SILICON	KTA1281_Y
△IC403	I1KJ9A431A	IC	KIA431A-AT	Q424	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK
△IC404	I1KJ9A431A	IC	KIA431A-AT	Q425	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK
△IC406	I1LF010150	IC	AL1015	Q431	TNAAA05001	COMPOUND TRANSISTOR	KRC101S-RTK
△IC407	I03T057790	IC	LA5779-E	Q432	TAAT01241Y	TRANSISTOR SILICON	KTA1241_Y-AT
△IC408	000220002W	PHOTO COUPLER	PS2561AL1-1-V(W)	△Q433	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
△IC409	000220002W	PHOTO COUPLER	PS2561AL1-1-V(W)	△Q434	T25F035630	FET	2SK3563(ORION_Q)
△IC410	000220002W	PHOTO COUPLER	PS2561AL1-1-V(W)	Q2401	TAAA1504SY	TRANSISTOR SILICON	KTA1504S_Y_RTK
IC801	S32M09SE01	MEMORY DATA	M24256-BWMN6TP	Q3002	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
IC802	I9UF032290	IC	PST3229NR	Q3003	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
IC803	S32M09SMO1	MEMORY DATA	VCT7993P-FA-A1-G-000	Q3004	TAAA01664Y	TRANSISTOR SILICON	KTA1664-Y-RTF/P
IC2401	I5PK05ALCO	IC	STI5105ALC	Q3200	T77J011320	TRANSISTOR SILICON	2SB1132T100(Q,R)
IC2402	I9UF032310	IC	PST3231NR	Q3201	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK
IC2403	ICLJ022EC5	IC	HY5DU561622ETP-D43-C	△Q3202	TS3M000044	COMPOUND TRANSISTOR	CPH6312-TL-E
	ICLJ022ET5	IC	HY5DU561622ETP-D43	Q3205	TAAA01664Y	TRANSISTOR SILICON	KTA1664-Y-RTF/P
IC2404	S30F01IF01	MEMORY DATA	SST39VF1601-70-4C-EKE	Q3206	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK
IC2409	I5PJ0064W0	IC	M24C64WMN6TP	Q3601	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
IC3001	I55F045FT0	IC	TC74LCX245FT(EL)	Q3602	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
IC3002	I55J0X2440	IC	TC74LCX244FT(EL,K)	Q3603	T2AA5132E0	FET	KT5132E-RTK/P
IC3003	I55J0X2440	IC	TC74LCX244FT(EL,K)	Q3604	T2AA5132E0	FET	KT5132E-RTK/P
IC3004	I55J0X2440	IC	TC74LCX244FT(EL,K)	Q3605	T2AA5132E0	FET	KT5132E-RTK/P
IC3005	I55J0X2440	IC	TC74LCX244FT(EL,K)	Q3606	T2AA5132E0	FET	KT5132E-RTK/P
IC3006	I55JOCX020	IC	TC74LCX02FT(EL)	Q3615	T2AA5132E0	FET	KT5132E-RTK/P
IC3007	I55F0125F0	IC	TC7SH125FU(TE85L,F	Q3616	T2AA5132E0	FET	KT5132E-RTK/P
△IC3201	I07F0C0WFO	IC	BA00BC0WFP-E2	Q3617	T2AA5132E0	FET	KT5132E-RTK/P
△IC3202	I1LF010150	IC	AL1015	Q3618	T2AA5132E0	FET	KT5132E-RTK/P
△IC3203	I07F078200	IC	BD7820FP-E2	Q3801	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
△IC3204	I07F078200	IC	BD7820FP-E2	Q3802	TAAA01664Y	TRANSISTOR SILICON	KTA1664-Y-RTF/P
△IC3205	I1KF98D050	IC	KIA78D05F	Q3803	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
△IC3601	I07F078200	IC	BD7820FP-E2	Q3804	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK
IC3605	IG1F090250	IC	SI19025CTU	Q3805	TAAA1504SY	TRANSISTOR SILICON	KTA1504S_Y_RTK
IC3606	S32M09SE02	MEMORY DATA	AT24C02BN-10SU-1.8	Q3806	TAAT01281Y	TRANSISTOR SILICON	KTA1281_Y
IC3609	S32M09SE03	MEMORY DATA	AT24C02BN-10SU-1.8	Q3807	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK
△IC3801	I07F0C0WFO	IC	BA00BC0WFP-E2	Q4201	TAAA1504SY	TRANSISTOR SILICON	KTA1504S_Y_RTK
IC4001	I5PK003620	IC	STV0362	Q4202	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
IC4201	I0UF015020	IC	MM1502XNRE	Q4203	TAAA1504SY	TRANSISTOR SILICON	KTA1504S_Y_RTK
IC4202	I0UF015010	IC	MM1501XNRE	Q4204	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
IC4203	I0UF015010	IC	MM1501XNRE	Q4205	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
IC4204	I0QF025840	IC	NJM2584AM(TE1)	Q4207	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
IC4205	I0QF025840	IC	NJM2584AM(TE1)	Q4208	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
IC4206	I0UF015010	IC	MM1501XNRE	Q4209	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
IC4303	I0QF02534V	IC	NJM2534V(TE2)	Q4210	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
IC4304	I0QF02534V	IC	NJM2534V(TE2)	Q4214	TAAA1504SY	TRANSISTOR SILICON	KTA1504S_Y_RTK
IC6001	I0CJ040530	IC	SN74LV4053APWR	Q4216	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
△IC6401	I07F078200	IC	BD7820FP-E2	Q4217	TPAAC05002	COMPOUND TRANSISTOR	KRA103SRTK
△IC6402	I07F078200	IC	BD7820FP-E2	Q4218	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK
△IC6403	I07F078200	IC	BD7820FP-E2	Q4221	TAAA1504SY	TRANSISTOR SILICON	KTA1504S_Y_RTK
△IC6404	I07F078200	IC	BD7820FP-E2	Q4222	TAAA1504SY	TRANSISTOR SILICON	KTA1504S_Y_RTK
△IC6405	I07F078200	IC	BD7820FP-E2	Q4223	TAAA1504SY	TRANSISTOR SILICON	KTA1504S_Y_RTK
IC6406	I0WF0H73C0	IC	TSH73CDT	Q4224	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
△IC6407	I07F078200	IC	BD7820FP-E2	Q4303	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
TRANSISTORS				Q4304	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
Q101	T2AA5132E0	FET	KT5132E-RTK/P	Q4305	TPAAB05001	COMPOUND TRANSISTOR	KRA102SRTK
Q102	T2AA5132E0	FET	KT5132E-RTK/P	Q4306	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
Q300	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK	Q4307	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
Q301	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK	Q4308	TPAAB05001	COMPOUND TRANSISTOR	KRA102SRTK
Q302	TAAA1504SY	TRANSISTOR SILICON	KTA1504S_Y_RTK	Q4309	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK
Q303	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK	Q4310	TNAAC05002	COMPOUND TRANSISTOR	KRC103SRTK
Q304	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK	Q6001	T2AA5132E0	FET	KT5132E-RTK/P
Q305	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK	Q6002	T2AA5132E0	FET	KT5132E-RTK/P
Q321	TPAAA05001	COMPOUND TRANSISTOR	KRA101SRTK	Q6005	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK
Q401	TCAT03209Y	TRANSISTOR SILICON	KTC3209_Y-AT	COILS & TRANSFORMERS			
Q402	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK	L104	0216SD220J	COIL	22 UH
Q403	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK	L300	021U0L220M	COIL	22 UH
Q404	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK	L302	021U0L220M	COIL	22 UH
△Q405	TCAT03209Y	TRANSISTOR SILICON	KTC3209_Y-AT	△L401	029X000135	COIL,LINE FILTER	SS30V-R150270
△Q406	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK	△L402	029X000135	COIL,LINE FILTER	SS30V-R150270
△Q407	TAAT01281Y	TRANSISTOR SILICON	KTA1281_Y	△L403	02F1000001	COIL CHOKE	DBE-688
Q408	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK	△L405	02167E220K	COIL	22 UH
Q409	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK	L408	021U0L470M	COIL	47 UH
△Q410	TJ7M50P030	FET	RSS050P03_TB	L409	021U0L330M	COIL	33 UH
Q411	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK	L413	02167E100K	COIL	10 UH
Q412	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK	L415	02167E220K	COIL	22 UH
Q415	TAAA1504SY	TRANSISTOR SILICON	KTA1504S_Y_RTK	L2401	0216SD2R2J	COIL	2.2 UH
Q416	TAAA1504SY	TRANSISTOR SILICON	KTA1504S_Y_RTK	L2402	0216SD2R2J	COIL	2.2 UH
Q417	TAAT01241Y	TRANSISTOR SILICON	KTA1241_Y-AT	L2403	0216SD2R2J	COIL	2.2 UH
Q418	TNAAA05001	COMPOUND TRANSISTOR	KRC101S-RTK	L2404	0216SD2R2J	COIL	2.2 UH

# ELECTRICAL REPLACEMENT PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
<b>COILS &amp; TRANSFORMERS</b>			<b>MISCELLANEOUS</b>		
L3001	0216SD2R2J	COIL 2.2 UH	B301	024HT03564	CORE,BEADS W4BRH3.5X6X1.0
L3002	0216SD2R2J	COIL 2.2 UH	B302	024HT03564	CORE,BEADS W4BRH3.5X6X1.0
L3201	02167E220K	COIL 22 UH	B303	024HT03564	CORE,BEADS W4BRH3.5X6X1.0
L3202	021U0L330M	COIL 33 UH	B304	024HT03564	CORE,BEADS W4BRH3.5X6X1.0
L3203	02167E220K	COIL 22 UH	B305	024HC51816	CORE,BEADS HCB1608KF-181T20
L3601	02D6000068	COIL CHOKE ACM2012D-900-2P-T00	B306	024HT03564	CORE,BEADS W4BRH3.5X6X1.0
L3602	02D6000068	COIL CHOKE ACM2012D-900-2P-T00	B307	024HT03564	CORE,BEADS W4BRH3.5X6X1.0
L3603	02D6000068	COIL CHOKE ACM2012D-900-2P-T00	B401	024HT03553	CORE,BEADS W5RH3.5X5X1.0
L3604	02D6000068	COIL CHOKE ACM2012D-900-2P-T00	B402	024HC51816	CORE,BEADS HCB1608KF-181T20
L3605	02D6000068	COIL CHOKE ACM2012D-900-2P-T00	B403	024HC51816	CORE,BEADS HCB1608KF-181T20
L3606	02D6000068	COIL CHOKE ACM2012D-900-2P-T00	B404	024HT03553	CORE,BEADS W5RH3.5X5X1.0
L3607	02D6000068	COIL CHOKE ACM2012D-900-2P-T00	B801	024HC51816	CORE,BEADS HCB1608KF-181T20
L3608	02D6000068	COIL CHOKE ACM2012D-900-2P-T00	B802	024HC51816	CORE,BEADS HCB1608KF-181T20
L4001	0216SD2R2J	COIL 2.2 UH	B803	024HC51816	CORE,BEADS HCB1608KF-181T20
L4002	0216SD2R2J	COIL 2.2 UH	B804	024HC51816	CORE,BEADS HCB1608KF-181T20
L4004	0216SD2R2J	COIL 2.2 UH	B805	024HC51816	CORE,BEADS HCB1608KF-181T20
L4201	021LA6101J	COIL 100 UH	B806	024HC51816	CORE,BEADS HCB1608KF-181T20
L4202	021LA6220J	COIL 22 UH	B807	024HC51816	CORE,BEADS HCB1608KF-181T20
L4203	021LA6220J	COIL 22 UH	B808	024HC51816	CORE,BEADS HCB1608KF-181T20
L4204	021LA6220J	COIL 22 UH	B809	024HC51816	CORE,BEADS HCB1608KF-181T20
L4205	021LA6220J	COIL 22 UH	B810	024HC51816	CORE,BEADS HCB1608KF-181T20
L4206	021LA6220J	COIL 22 UH	B811	024HC51816	CORE,BEADS HCB1608KF-181T20
L4207	021LA6220J	COIL 22 UH	B812	024HC51816	CORE,BEADS HCB1608KF-181T20
L4208	021LA6220J	COIL 22 UH	B813	024HC51816	CORE,BEADS HCB1608KF-181T20
L4209	0216MA220K	COIL 22 UH	B817	024HC56005	CORE,BEADS FCM1608CF-600T06
L4210	0216MA220K	COIL 22 UH	B818	024HC51816	CORE,BEADS HCB1608KF-181T20
L4211	021LA6220J	COIL 22 UH	B819	024HC51816	CORE,BEADS HCB1608KF-181T20
L4212	021LA6220J	COIL 22 UH	B2401	024HC56005	CORE,BEADS FCM1608CF-600T06
L4213	021LA6100J	COIL 10 UH	B2402	024HC56005	CORE,BEADS FCM1608CF-600T06
L4214	021LA6470J	COIL 47 UH	B2403	024HC56005	CORE,BEADS FCM1608CF-600T06
L4215	0216S81R5M	COIL 1.5 UH	B2404	024HC56005	CORE,BEADS FCM1608CF-600T06
L4216	0216S81R5M	COIL 1.5 UH	B2405	024HC56005	CORE,BEADS FCM1608CF-600T06
L4217	021LA6100J	COIL 10 UH	B2406	024HC56005	CORE,BEADS FCM1608CF-600T06
L4218	0216S81R5M	COIL 1.5 UH	B3001	024HC56005	CORE,BEADS FCM1608CF-600T06
L4219	021LA6470J	COIL 47 UH	B3002	024HC56005	CORE,BEADS FCM1608CF-600T06
L4221	021LA6470J	COIL 47 UH	B3201	024HC51216	CORE,BEADS HCB1608KF-121T20
L4223	021LA6470J	COIL 47 UH	B3601	024HC51816	CORE,BEADS HCB1608KF-181T20
L4224	0216S91R5M	COIL 1.5 UH	B3602	024HC51816	CORE,BEADS HCB1608KF-181T20
L4225	021LA6100J	COIL 10 UH	B3603	024HC51816	CORE,BEADS HCB1608KF-181T20
L4226	021LA6470J	COIL 47 UH	B3604	024HC51816	CORE,BEADS HCB1608KF-181T20
L4227	021LA6220J	COIL 22 UH	B3605	024HC56005	CORE,BEADS FCM1608CF-600T06
L4230	0216MA220K	COIL 22 UH	B3606	024HC51023	CORE,BEADS FCM1608KF-102T02
L4231	0216MA220K	COIL 22 UH	B3608	024HC51023	CORE,BEADS FCM1608KF-102T02
L4232	0216S91R5M	COIL 1.5 UH	B3609	024HC51816	CORE,BEADS HCB1608KF-181T20
L4233	021LA6470J	COIL 47 UH	B3610	024HC51816	CORE,BEADS HCB1608KF-181T20
L4305	0216SD220J	COIL 22 UH	B3613	024HC51816	CORE,BEADS HCB1608KF-181T20
L4306	0216SD220J	COIL 22 UH	B3801	024HT03564	CORE,BEADS W4BRH3.5X6X1.0
L6401	0216SD100J	COIL 10 UH	B4001	024HC56005	CORE,BEADS FCM1608CF-600T06
L6406	0216SD2R2J	COIL 2.2 UH	B4002	024HC56005	CORE,BEADS FCM1608CF-600T06
L6408	0216SD4R7J	COIL 4.7 UH	B4003	024HC56005	CORE,BEADS FCM1608CF-600T06
L6409	0216SD4R7J	COIL 4.7 UH	B4200	024HC56005	CORE,BEADS FCM1608CF-600T06
L6410	0216SD4R7J	COIL 4.7 UH	B4202	024HC56005	CORE,BEADS FCM1608CF-600T06
△T401	0487420014	TRANSFORMER,SWITCHING 87420014	B4203	024HC56013	CORE,BEADS FCM1608KF-601T02
△T402	0481190074	TRANSFORMER,SWITCHING 81190074	B4204	024HC56013	CORE,BEADS FCM1608KF-601T02
<b>JACKS</b>			B4205	024HC56005	CORE,BEADS FCM1608CF-600T06
△J401	064Q1A0003	JACK,AC CCT2302-0911	B4206	024HC56005	CORE,BEADS FCM1608CF-600T06
J4202	060R431037	RCA JACK RCA-349-00C-05	B4207	024HC56005	CORE,BEADS FCM1608CF-600T06
J4203	060R411054	RCA JACK RCA-349-00D-01	B4208	024HC56005	CORE,BEADS FCM1608CF-600T06
J4204	063Y000089	JACK PLATE RCA/DIN-501A-00B-03	B4209	024HT03563	CORE,BEADS W4BRH3.5X6X1.0X2
J4205	060J131021	HEADPHONE JACK MSJ-035-08D_PC(O87)	B4210	024HT03563	CORE,BEADS W4BRH3.5X6X1.0X2
J4206	063D000077	SOCKET,21PIN MRC-021V-27_PC	B4211	024HT03563	CORE,BEADS W4BRH3.5X6X1.0X2
J4301	060J151001	HEADPHONE JACK MSJ-035-39D_B_PC_LF(O87)	B4212	024HT03563	CORE,BEADS W4BRH3.5X6X1.0X2
<b>SWITCHES</b>			B4213	024HT03563	CORE,BEADS W4BRH3.5X6X1.0X2
SW2201	0504101T34	SWITCH,TACT EVQ21505R	B4214	024HC56005	CORE,BEADS FCM1608CF-600T06
SW2202	0504101T34	SWITCH,TACT EVQ21505R	B4215	024HC53306	CORE,BEADS HCB1608KF-330T50
SW2203	0504101T34	SWITCH,TACT EVQ21505R	B4216	024HC53306	CORE,BEADS HCB1608KF-330T50
SW2204	0504101T34	SWITCH,TACT EVQ21505R	B4221	024HC53306	CORE,BEADS HCB1608KF-330T50
SW2205	0504101T34	SWITCH,TACT EVQ21505R	B4222	024HC53306	CORE,BEADS HCB1608KF-330T50
SW2206	0504101T34	SWITCH,TACT EVQ21505R	B4223	024HC53306	CORE,BEADS HCB1608KF-330T50
SW2207	0504101T34	SWITCH,TACT EVQ21505R	B4224	024HC53306	CORE,BEADS HCB1608KF-330T50
<b>P.C.BOARD ASSEMBLIES</b>			B4226	024HC53306	CORE,BEADS HCB1608KF-330T50
PCB240	A32M09S240L	POWER PCB ASS'Y CEF273A	B4227	024HC53306	CORE,BEADS HCB1608KF-330T50
PCB270	A32M09S270L	OPERATION PCB ASS'Y CEF274A	B4228	024NC51021	CORE,BEADS EBMS160808A102_RDC45
PCBD40	A32M09SDA0L	REMOCON PCB ASS'Y CEF275A	B4229	024NC51021	CORE,BEADS EBMS160808A102_RDC45
PCBDH0	A32M09SDH0L	DIGITAL PCB ASS'Y CEF243A	B4301	024NC51021	CORE,BEADS EBMS160808A102_RDC45
PCBF40	A32M09SF40L	MAIN PCB ASS'Y CMF111B	B4302	024NC51021	CORE,BEADS EBMS160808A102_RDC45
			B4303	024HC56005	CORE,BEADS FCM1608CF-600T06



# ELECTRICAL REPLACEMENT PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION		
MISCELLANEOUS			MISCELLANEOUS				
B4304	024HC56005	CORE,BEADS	FCM1608CF-600T06	NR2407	110P4560M5	R.NETWORK	4D02WVGJ0560TCE
B4305	024HC56005	CORE,BEADS	FCM1608CF-600T06	NR2408	110P4000M5	R.NETWORK	4D02WVGJ0000TCE
B4306	024HC51816	CORE,BEADS	HCB1608KF-181T20	NR2409	110P4000M5	R.NETWORK	4D02WVGJ0000TCE
B4307	024HC51816	CORE,BEADS	HCB1608KF-181T20	NR2410	110P4000M5	R.NETWORK	4D02WVGJ0000TCE
B4309	024HC51816	CORE,BEADS	HCB1608KF-181T20	NR2411	110P4000M5	R.NETWORK	4D02WVGJ0000TCE
B4312	024HC56005	CORE,BEADS	FCM1608CF-600T06	NR2412	110P4000M5	R.NETWORK	4D02WVGJ0000TCE
B4314	024NC51021	CORE,BEADS	EBMS160808A102_RDC45	NR2413	110P4000M5	R.NETWORK	4D02WVGJ0000TCE
B4315	024NC51021	CORE,BEADS	EBMS160808A102_RDC45	NR2414	110P4000M5	R.NETWORK	4D02WVGJ0000TCE
B4317	024HC51816	CORE,BEADS	HCB1608KF-181T20	NR2415	110P4000M5	R.NETWORK	4D02WVGJ0000TCE
B4318	024HC51816	CORE,BEADS	HCB1608KF-181T20	NR2416	110P4000M5	R.NETWORK	4D02WVGJ0000TCE
B4322	024HC56005	CORE,BEADS	FCM1608CF-600T06	NR2417	110P4000M5	R.NETWORK	4D02WVGJ0000TCE
B4324	024HC51816	CORE,BEADS	HCB1608KF-181T20	NR2418	110P4470M5	R.NETWORK	4D02WVGJ0470TCE
B4326	024HC51816	CORE,BEADS	HCB1608KF-181T20	NR2419	110P4470M5	R.NETWORK	4D02WVGJ0470TCE
B6001	024HC56013	CORE,BEADS	FCM1608KF-601T02	NR2420	110P4560M5	R.NETWORK	4D02WVGJ0560TCE
B6003	024HT03563	CORE,BEADS	W4BRH3.5X6X1.0X2	NR2421	110P4560M5	R.NETWORK	4D02WVGJ0560TCE
B6401	024HC51023	CORE,BEADS	FCM1608KF-102T02	NR2422	110P4560M5	R.NETWORK	4D02WVGJ0560TCE
B6402	024HC51023	CORE,BEADS	FCM1608KF-102T02	NR3001	110P4470M5	R.NETWORK	4D02WVGJ0470TCE
B6403	024HC56005	CORE,BEADS	FCM1608CF-600T06	NR3002	110P4470M5	R.NETWORK	4D02WVGJ0470TCE
B6404	024HC51023	CORE,BEADS	FCM1608KF-102T02	NR3003	110P4470M5	R.NETWORK	4D02WVGJ0470TCE
B6405	024HC51023	CORE,BEADS	FCM1608KF-102T02	NR3004	110P4470M5	R.NETWORK	4D02WVGJ0470TCE
B6406	024HC51023	CORE,BEADS	FCM1608KF-102T02	NR3005	110P4470M5	R.NETWORK	4D02WVGJ0470TCE
B6407	024HC51023	CORE,BEADS	FCM1608KF-102T02	NR3006	110P4470M5	R.NETWORK	4D02WVGJ0470TCE
B6408	024HC51023	CORE,BEADS	FCM1608KF-102T02	NR3007	110P4470M5	R.NETWORK	4D02WVGJ0470TCE
B6409	024HC51023	CORE,BEADS	FCM1608KF-102T02	NR3008	110P4470M5	R.NETWORK	4D02WVGJ0470TCE
B6410	024HC51023	CORE,BEADS	FCM1608KF-102T02	NR3009	110P4470M5	R.NETWORK	4D02WVGJ0470TCE
B6411	024HC51023	CORE,BEADS	FCM1608KF-102T02	NR3010	110P4470M5	R.NETWORK	4D02WVGJ0470TCE
B7201	024HC51816	CORE,BEADS	HCB1608KF-181T20	NR3011	110P4470M5	R.NETWORK	4D02WVGJ0470TCE
BT001	141R003018	BATTERY,MANGAN	GR6M	NR3012	110P4470M5	R.NETWORK	4D02WVGJ0470TCE
BT002	141R003018	BATTERY,MANGAN	GR6M	NR3601	110P4330M4	R.NETWORK	4D03WVGJ0330T5E
CD302	06CU145005	CORD CONNECTOR	CU145005	NR3602	110P4330M4	R.NETWORK	4D03WVGJ0330T5E
CD403	06CU2E2202	CORD CONNECTOR	CU2E2202	NR3603	110P4330M4	R.NETWORK	4D03WVGJ0330T5E
CP101	069S260629	CONNECTOR PCB SIDE	A2001VV2-6P	NR3604	110P4330M4	R.NETWORK	4D03WVGJ0330T5E
CP301	069S140419	CONNECTOR PCB SIDE	A2502WV2-4P	NR3605	110P4330M4	R.NETWORK	4D03WVGJ0330T5E
CP401	069D01001A	CONNECTOR PCB SIDE	003P-2100	NR3606	110P4330M4	R.NETWORK	4D03WVGJ0330T5E
CP405	069D01001A	CONNECTOR PCB SIDE	003P-2100	OS2201	077A033001	REMOTE RECEIVER	ROM-V338TAO
CP406	069S2E0639	CONNECTOR PCB SIDE	A2001WR2-14P	△RY401	0560V50119	RELAY	ALKS329 A60
CP408	069D01001A	CONNECTOR PCB SIDE	003P-2100	△SP301	070Y056003	SPEAKER	S0412F03
CP411	06977N001B	CONNECTOR PCB SIDE	TWG-P23P-B1	△SP302	070Y056003	SPEAKER	S0412F03
CP412	069779001B	CONNECTOR PCB SIDE	TWG-P09P-B1	SH2401	126D000044	TERMINAL PIN	YQ-36
CP413	069D01001A	CONNECTOR PCB SIDE	003P-2100	SH2402	126D000044	TERMINAL PIN	YQ-36
CP802	069S260629	CONNECTOR PCB SIDE	A2001VV2-6P	SH2403	126D000044	TERMINAL PIN	YQ-36
CD3810	120Q155804	CORD AC	P205-1324-4	SH2404	126D000044	TERMINAL PIN	YQ-36
CD4301	06CU258302	CORD CONNECTOR	CU258302	SH4301	126D000044	TERMINAL PIN	YQ-36
CD4302	06CU238201	CORD CONNECTOR	CU238201	SH4302	126D000044	TERMINAL PIN	YQ-36
CD7204	06CHRU2207	CORD CONNECTOR	CHRU2207	SH4303	126D000044	TERMINAL PIN	YQ-36
CP2201	069S250639	CONNECTOR PCB SIDE	A2001WR2-5P	SH4304	126D000044	TERMINAL PIN	YQ-36
CP2203	069S230639	CONNECTOR PCB SIDE	A2001WR2-3P	SH4305	126D000044	TERMINAL PIN	YQ-36
CP2401	069S250679	CONNECTOR PCB SIDE	A2006WRO-2X5P	SH4306	126D000044	TERMINAL PIN	YQ-36
CP2402	069S250629	CONNECTOR PCB SIDE	A2001VV2-5P	SH4307	126D000044	TERMINAL PIN	YQ-36
CP3001	069EN68020	CONNECTOR PCB SIDE	36_5027_068_130_831+	△TH401	DSQ0VE4R0L	THERMISTOR	4D2-18LCS
CP3002	063M800002	HOLDER,IC	30_5027_000_102_000+	TM101	076RONV010	TRANSMITTER	R56-1236
CP3400	069S220629	CONNECTOR PCB SIDE	A2001VV2-2P	△TU6002	0164Y03002	DIGITAL TUNER	TDTG-S156D
CP3601	0694YJ3018	CONNECTOR PCB SIDE	1903015-3	△V2301	09EB132021	LCD	LTA320WT-L05
CP3603	0694YJ3018	CONNECTOR PCB SIDE	1903015-3	X101	100GT01615	CRYSTAL	B16000E007
CP3801	06977NM020	CONNECTOR PCB SIDE	127301123K2	X801	100DT02007	CRYSTAL	DSX840GA
CP3802	069779M020	CONNECTOR PCB SIDE	127301109K2	X2401	100GT02720	CRYSTAL	B27000C005
CP4301	069S250629	CONNECTOR PCB SIDE	A2001VV2-5P	X3602	100DT02801	CRYSTAL	SMD-49
CP4302	06G2S21502	CONNECTOR PCB SIDE	D229FD015S107BY	X4001	100GT02720	CRYSTAL	B27000C005
CP4304	069S230629	CONNECTOR PCB SIDE	A2001VV2-3P	RESISTOR			
CP6001	06972UM018	CONNECTOR PCB SIDE	TKC-W30P-P1	RC.....			CARBON RESISTOR
CP6401	06972UT018	CONNECTOR PCB SIDE	125622330K3	CAPACITORS			
CP7201	06G3VWT01A	CONNECTOR PCB SIDE	20389-Y30E	CC.....			CERAMIC CAPACITOR
EL2401	124116281A	EYE LET	XRY16X28BD	CE.....			ALUMI ELECTROLYTIC CAPACITOR
EL2402	124120301A	EYE LET	XRY20X30BD	CP.....			POLYESTER CAPACITOR
F401	080NT05004	FUSE	50T050H	CPP.....			POLYPROPYLENE CAPACITOR
F404	0835C02003	MICRO FUSE	20N_2000FS	CPL.....			PLASTIC CAPACITOR
FH401	06710T0009	HOLDER,FUSE	EYF-52BCY	CMP.....			METAL POLYESTER CAPACITOR
FH402	06710T0009	HOLDER,FUSE	EYF-52BCY	CMPL.....			METAL PLASTIC CAPACITOR
M3400	1519Y55L01	FAN MOTOR	2004KL-04W-B30-M09	CMPP.....			METAL POLYPROPYLENE CAPACITOR
NR801	110P4470M4	R.NETWORK	4D03WVGJ0470T5E				
NR802	110P4470M4	R.NETWORK	4D03WVGJ0470T5E				
NR2401	110P4560M5	R.NETWORK	4D02WVGJ0560TCE				
NR2402	110P4560M5	R.NETWORK	4D02WVGJ0560TCE				
NR2403	110P4560M5	R.NETWORK	4D02WVGJ0560TCE				
NR2404	110P4560M5	R.NETWORK	4D02WVGJ0560TCE				
NR2405	110P4560M5	R.NETWORK	4D02WVGJ0560TCE				
NR2406	110P4560M5	R.NETWORK	4D02WVGJ0560TCE				

SPEC.NO.	M32M-09S
O/R NO.	U793518